ProNet PLUS

ACTEC SERIES

Access Control & Alarm Management Software

CROW
Electronic Engineering Ltd

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1. WELCOME

1.1. About PRONET PLUS

The ACTEC PRONET PLUS, the sophisticated yet user-friendly access control and alarm management software, centralizes security requirements within all types of installation irrespective of their complexity.

PRONET PLUS offers intelligent and flexible access control that manages cardholders' information, time zones, access levels and relays activation. Controllers and badge holders are automatically created with a click of a mouse. The set-up process is therefore reduced to minutes instead of hours.

PRONET PLUS alarm management module monitors all alarm events and movements in real time. All the information needed to react immediately with full knowledge of the facts is provided on the screen. Security is reinforced as alarm conditions and events automatically trigger predefined reactions: flashing icons on relevant displayed maps, written and vocal instructions, alarms, CCTV or any programmed relay activation, zone on/off alarm, card invalidation, etc.

PRONET PLUS transforms your facility into a smart building. The passage of a badge at the exit automatically switches off the lights and heating in any designated area, thus allowing for energy savings. Switching on the heating in the office of the person who has passed its badge at the car park entrance.

1.2. Monitoring Tool

1.2.1. Access Control

Access Control tool allow you to define "who is going where and when". Smart multi-technology controllers, linked to advance identification systems, allow to equip each person with a personalised card or another ID that controls access.

Your organization can prevent material or information robbery, by limiting / supervising the access to all or part of your facility (lab, computer room, or storage areas) to authorized persons, during specific time periods.

When a badge holder requests permission to access a particular area, the information is relayed from the reader to the controller. The controller either grants or denies access according to the parameters defined (access authorization, time zones, etc.) All these parameters are down-loaded from the central station (through PRONET PLUS) to the controllers into authorization tables and therefore, controllers decide by themselves to grant or deny access, without involving the central station. The transactions are then sent to the central station and listed in the log and the journal.

Access control parameters are mainly defined in the " Parameter" section of the application.

1.2.2. Alarm Management

Your organization can prevent catastrophes or limit damage by being informed of abnormal events and reacting to them in real time. Alarm Monitoring usually functions in coordination with Access Control.

Alarm management consists in supervising alarm inputs. Different sensors, such as magnetic contacts, motion detectors, broken window sensors and temperature indicators are connected to intelligent controllers that centralize the information. As soon as an alarm is activated the system reacts: CCTV cameras, alarms, heating switched on or off, display of pre-defined maps and instructions on the screen, etc.

Alarm management parameters are mainly defined in the “Parameter” and “Event Handling” sections of the application.

1.2.3. Lift Management

PRONET PLUS provides a solution for supervising access in lifts. The user passes his badge into a lift reader: If access is granted within the time zone, only the floor buttons corresponding to his authorization may be used.

In case of buildings shared by several firms, each person will only be able to select the floor(s) attributed to the company he/she belongs.

Lift management parameters are mainly defined in the “Lift Program” menus in the “Modules” section of the application.

1.2.4. Parking Management

PRONET PLUS enables to monitor access to designate parking spaces. The software monitors the filling up of parking zones with respect to groups of users and pre-defined number of places in the cardholder zone, and allows establishing attendance sheets.

The necessary parameters are mainly defined in the “Parking” menus of the “Modules” section of the software.

1.2.5. Time & Attendance Management

Time & attendance management facilitates the computation of employee attendance, overtime, absences and lateness. It allows calculating pay slips more efficiently.

Time & attendance parameters are mainly defined in the “Roll call” menu of the “Modules” section of the software.

1.3. Types of Installations

PRONET PLUS centralizes security within any type of on-line installation:

- Big or small installation
- TCP/IP, RS485 or modem networks
- Single or remote sites
- Single or multiple company sites

1.4. Modules

1.4.1. Database

The database module allows creating and modifying databases (reader, systems, badge holders, time zones, etc.)

As soon as a data is created or modified, it is recorded in a file, which is then sent to the controller via the communication module.

Database parameters are defined in the "Create", "Save" and "Restore Database" screens in the "Tools" section of the application. Similar options exist for the journal.

1.4.2. Communication

The communication module coordinates the data transfer between the main computer and the controllers that detect the events. The information collected is recorded in the journal and displayed in the log.

1.4.3. Operation

The operational module interprets information collected by the communication module. Its role is to activate predefined tasks such as alarms, reflexes, etc.

The events to consider, and the resulting actions, are specified in the different screens of the "Event Handling" section.

1.5. Basic Configuration

1.5.1. Operating System and Computer

Operating system:
Windows 2000 Pro or Windows XPRO or Windows 2003 Server

The manufacturer recommends these two operating systems and is not responsible for errors occurring while using other operating systems.

Computer:
Pentium IV minimum
256 MB RAM (or 1 GB RAM for installations with more than 100 controllers or with SQL Server)
500 MB free hard disk space
CDROM Drive
1 free serial COM port and 1 parallel port or USB port

Recommended enhancement:
Sound Card , Speakers , SVGA definition (800*600)

1.5.2. Controllers

All ACTEC controllers for on-line networks are compatible with PRONET PLUS.

1.5.3. Readers

The vast majority of readers available on the market are compatible with the PRONET PLUS system: magnetic, proximity, bar code, smart card, biometry, Wiegand, contact, infrared, keypad, etc.

Consult with your PRONET PLUS reseller for further information.

1.5.4. Other Materials

In order to successfully install and run the PRONET PLUS system, other materials are required. These vary according to each installation: computer network, devices to open doors, alarm detectors, etc. Consult with your PRONET PLUS provider for further details.

Note: This product uses software developed by Spread Concepts LLC for use in the Spread toolkit. For more information about Spread see http://www.spread.org.

1.6. General Use of PRONET PLUS

1.6.1. First Installation

Setup - Amadeus 5
Welcome to the Amadeus 5 Setup Wizard
This will install Amadeus 5 version 1.3.023 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

Insert the PRONET PLUS Installation CD: the Installation Wizard is automatically launched. If not, run the 'autorun.exe' file in the 'autorun' folder of the PRONET PLUS Installation CD.

Follow then the step by step instructions.

Note: Do not install the application using the 'setup.exe' file of the CD; should you do so, the following warning message will be displayed:

"Setup will not start. Contact your vendor".

PRONET PLUS on Server/Workstation architecture:

During the installation, the user is asked to select if the application must run as a Server or as a Workstation. If PRONET PLUS runs on one computer only, select 'Server'. If on several computers (for a Server/Workstations architecture), do as follows:

1- Install PRONET PLUS on the computer that will be the Server and specify 'Server' during the installation process.

2- Share the PRONET PLUS folder to the required Workstation(s).

3- Once installed, run the application and define all the computers, Server and Workstation(s), through the 'Parameter - Computer' screen.

4- Install PRONET PLUS on each workstation and specify 'workstation' during the installation process. It will ask the user to select the Server network path.

Database type:

During the installation, the user is asked to select the database format: 'Access' or 'SQL'. If 'SQL' has to be requested, ensure first that the Microsoft SQL server or MSDE (the SQL server engine) is already running in the computer or in the network and the PRONET PLUS plug has the SQL license.

1.6.2. Demonstration Version

A demo version of the PRONET PLUS software is available. It includes all functions referring to alarms, graphics, lift management and time management. Nevertheless the capability of the demo version is restricted to two controllers, four readers and ten cardholders. In order to exceed these capabilities and to use the software in a real situation, a plug is requested.

1.6.3. Plug (Dongle)

Different plugs are available. The combination of plugs purchased is described in the 'Help – About PRONET PLUS' screen and defines the system capability.

- nC: Maximum No. ('n') of Controllers allowed
- nR: Maximum No. ('n') of Readers allowed
- nB: Maximum No. ('n') of Badgeholders allowed
- nW: Maximum No. ('n') of Workstations allowed
- A: Alarm Module
- G: Graphic Module
- P: Parking Module
- L: Lift Module
- T: Time & attendance Module
- M: Multi-company Module
- U: Guard patrol Module
- O: OPC Server Module
- SQL: MS-SQL database support
- BP: Badge Printing Module
- V : Video Module

Tips & Notes

NetHasp support for Terminal Server application compatibility

PRONET PLUS can work either from a Terminal Server PC or from a Terminal Client. However, this requires the use of a special plug (NetHasp) that is a type of plug being able to work with the Terminal application. With a regular plug, the Terminal Client workstation looks for the installed plug on the PC. Using the NetHasp plug, the plug can be physically installed on the Server or on any other PC on the LAN, and to be read by PRONET PLUS through the network.

Operating Mode :

- Order the special NetHasp plug (looks the same, though it is colored red),
- Install it on the machine where PRONET PLUS is installed, or on any other PC on the LAN.
- Install the "Aladdin License Manager" application on the PC where the plug is physically located. (It is better to install it as a 'Service'. This way doesn't need to log on to Windows in order to make it run after a PC start).
- Exit PRONET PLUS and look for the Amadeus5.ini file in the PRONET PLUS folder.
- Open this file with Notepad and check that the following command exists:

```
NetHasp = 1
```

  If this line does not exist, run the application, go to "Tools - Options" and click "OK". This operation rebuilds the ini file and inserts all the possible entries according to the latest application version.
- Set the value to 1
- Save and close this file, then restart PRONET PLUS.

1.6.4. Running PRONET PLUS

Start the PRONET PLUS application by double-clicking on its shortcut or by clicking on Start/Programs/PRONET PLUS/PRONET PLUS from Windows Desktop. Type the User name and the Password and click OK. The application main menu appears on the screen.

Tips & Notes

Significance of lower case and capital letters

The “User name” and “Password” fields notice the difference between lower case and capital letters. For example: the computer will interpret AFI, afi, and aFi differently.

Three attempts

If the user name and the password are not correctly entered after three attempts, the start window will disappear from the screen.

Using the software for the first time

It is recommended to change the user name and the password at the first use of PRONET PLUS and to store this information in a secure place.

Skip the user name and password request

Start your application without being prompted for a user name and a password every time the application is started, by setting them in the initialisation parameters, as follow:

- Point the mouse to the shortcut of the application
- Press on the right click of the mouse
- Select “Properties”
- Add the user name and password at the end of the “Target” field (after “Amadeus5.exe”) as follow: [space]/us:user name [space]/pw:password
- Click OK

1.6.5. Modifying Data Entry

To modify an existing entry:

- Select the desired screen
- Choose a data entry
- Modify the fields (Choose self-explanatory names)
- Click on the “Save” icon from the navigation bar to confirm the modification of the data captures
- Click on the “Close” icon to terminate the data entry operations and to return to the general screen or click on the “F12” function key.

1.6.6. New Data Entry

To create a new data entry:

- Select the required screen
- Click on the “New” icon from the navigation bar, to create a new data entry
- Give a name to the new data entry in the field entitled “Name” (Choose self-explanatory names)
- Define the new data entry in the field entitled “Description”
- Fill in the other fields
- Click on the “Save” icon from the navigation bar to confirm the creation of the data or press the “F3” function key
- Click on the “Close” icon to terminate entry operations and to come back to the general screen or press the ‘’F12’’ function key

Tips & Notes

Emptying fields

By clicking on the “New” icon all the fields are cleared away or set to their default value to allow new data entry.

1.6.7. Exiting the Application

In order to terminate a work session and exit the application, choose one of the following steps:

- Click on the “Exit” icon represented by a door, at the far right of the navigation bar
- Double-click on the icon represented by a magical wand, in the upper left corner of the screen
- Click on the cross X, in the upper right corner of the screen
- Click on the “F4” function key and, at the same time, on the “Alt” key
- Open the “Parameter” menu and choose the “Exit” option (at the bottom of the list)

The system offers the possibility to log off unauthorized users, without closing the application.

1.6.8. Update an PRONET PLUS version

To update an application already installed, do one of the two following procedures:

1- Using an ‘Update’ file:

Exit the application and run the ‘Update’ file (for example: ‘update_v1.3.023.exe’). Run it on the Server and on each Workstation.

2- Using a full new version of PRONET PLUS setup:

2.1 From PRONET PLUS, save the database and the journal from the ‘Tools – Save database’ and ‘Tools – Save journal’ menus.

2.2 Save the ‘Amadeus5.ini’ file from the PRONET PLUS folder.

2.3 Uninstall PRONET PLUS from the computer.

2.4 Install the new version in the same folder where the previous version was installed.

2.5 Copy the saved ‘Amadeus5.ini’ file in the PRONET PLUS folder, overwritting the existing file.

2.6 Enter the application. If the database and the journal have not been automatically restored by the process, restore them from the ‘Tools – Restore database’ and ‘Tools – Restore journal’ menus.

1.6.9. PRONET PLUS Database Protection

In the application folder there is a utility that allows password protection to the main database (Amadeus5.mdb). This protection prevents opening the database using Microsoft Access or any other application. To protect the database, follow the next steps:

Operating Mode :

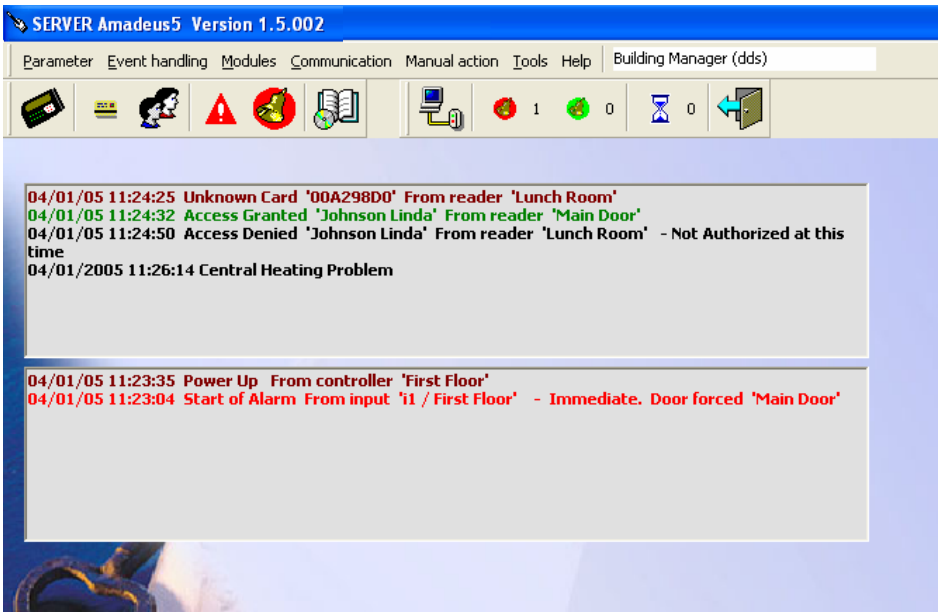
- Exit PRONET PLUS,
- Run ‘LockDB.exe’ from the main application folder,
- Click on ‘Select Database’ to select the main db (Amadeus5.mdb),
- Click on ‘Lock Database’.

2. GENERAL SCREENS

2.1. Main Screen

The main screen of PRONET PLUS allows an access to all system options through the use of:

- Scrolling menus, leading to all capture screens, information tables and system options
- Toolbar, providing shortcuts towards some important screens
- Log display, presenting the list of events in real time
- Progress bar, at the bottom of the screen, showing the current status of the commands.


SERVER Amadeus5 Version 1.5.002
Parameter Event handling Modules Communication Manual action Tools Help
Building Manager (dds)
04/01/05 11:24:25 Unknown Card '00A298D0' From reader 'Lunch Room'
04/01/05 11:24:32 Access Granted 'Johnson Linda' From reader 'Main Door'
04/01/05 11:24:50 Access Denied 'Johnson Linda' From reader 'Lunch Room' - Not Authorized at this time
04/01/2005 11:26:14 Central Heating Problem
04/01/05 11:23:35 Power Up From controller 'First Floor'
04/01/05 11:23:04 Start of Alarm From input 'i1 / First Floor' - Immediate. Door forced 'Main Door'

Tips & Notes

Tutorial

The help screen is available from any screen by pressing the “F1” function key and displays explanations of the current screen.

Reminding of consulted screens

The fields of the scrolling menus in the main screen appear in **black** before use. However after consultation, they appear in **blue**.

Multi-Windows

Several windows can be opened simultaneously.

Authorization Level

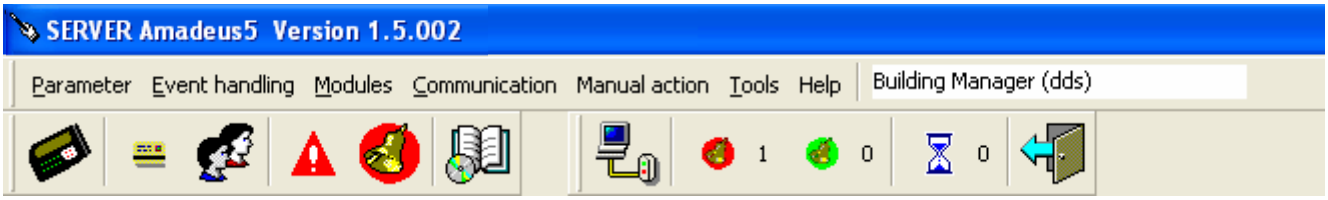
The options displayed depend on the authorization level of the user. Certain options are not suitable for certain users and therefore do not appear on the screen.

Dissociating the alarm log from the access log

By default, a single log shows access, alarms and system messages. It is possible to dissociate the alarm log from the access log, in the “Options – Tools – Journal / Log screen” screen.

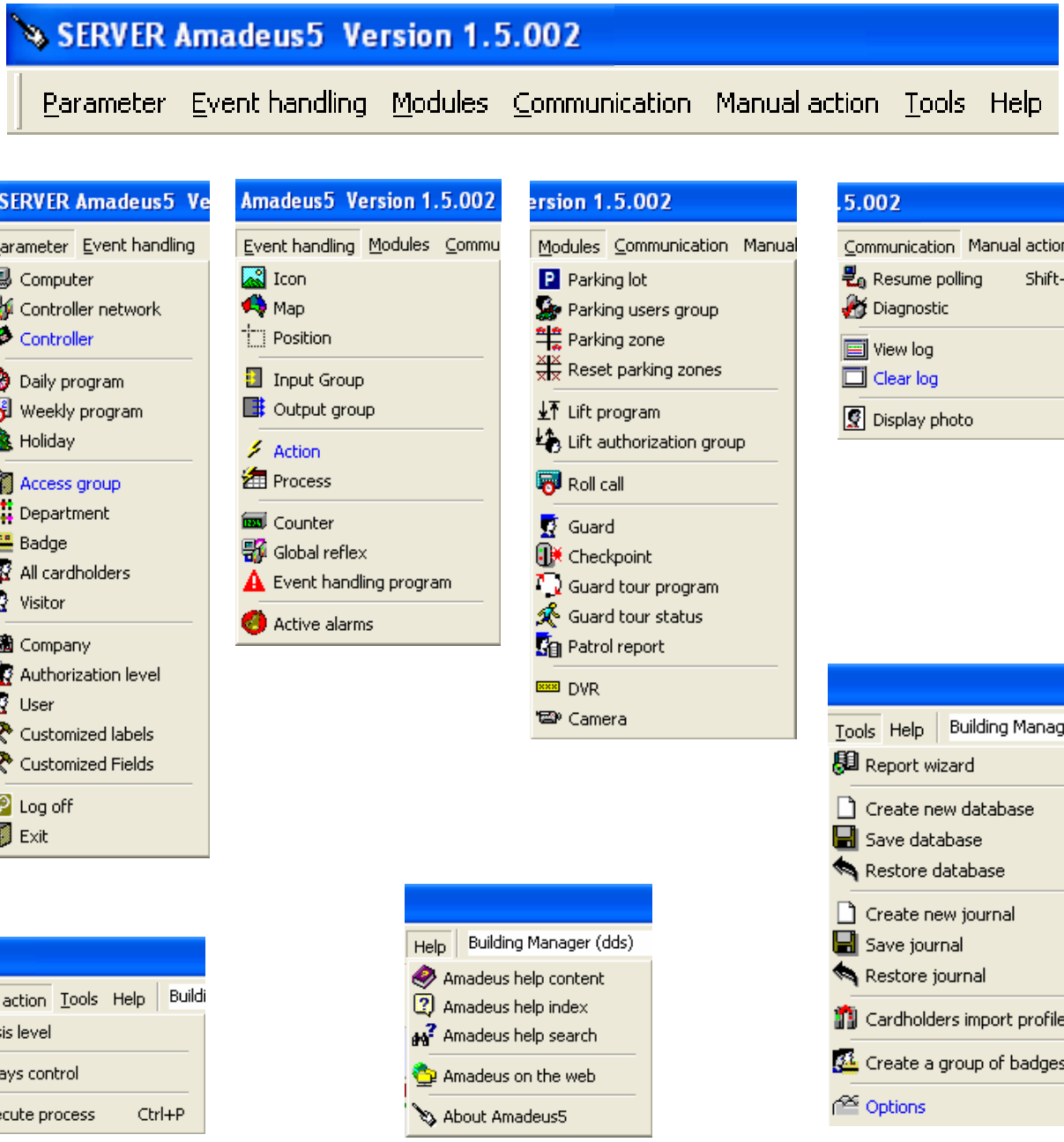
2.2. Tool Bar

The icons of the toolbar provide shortcuts to some important screens: Controller, Badge, All cardholders, Event handling program, Active alarms, Report wizard, Polling, Number of active alarms, Number of acknowledged alarms, Number of pending commands to be sent, Exit.



2.3. Scrolling Menus

Capture screens and menus are organized as follow:



These menus are those of the Version 1.5.002. New ones may be added on further versions.

2.4. Navigation Bar

The function keys correspond to the icons on the navigation bar are discribed here after. They are available from each capture screen.

F2	New	Define a new data entry
F3	Save	Save the current data information
F4	Delete	Delete the data selected
F5	First	Select the first data entry of the list
F6	Previous	Select the previous data entry
F7	Next	Select the next data entry
F8	Last	Select the last data entry of the list
F9	Download	Transfer all the parameters to the corresponding controllers even if the information has not been modified
F10	Search	Look for the desired data in the list
F11	Print	Generate automatically the report corresponding to the current data
F12	Close	Close the screen and return to the previous screen

Tips & Notes

Tutorial

F1	Help	Display the help screen of the current screen

New Data

By clicking on the F2 key, the fields of the newly created item are empty to allow entry of new data. If existing information has not yet been saved, a message appears requesting the user to save or cancel the changes. Saving (F3 key) transfers automatically the modified parameters to corresponding controllers.

2.5. Personalized Navigation Bar

A customized toolbar gives added flexibility to the system.

Creating a customized toolbar

- Place the mouse on the original toolbar
- Click on the mouse right button
- Select “Customize” in the menu that appears on the screen for opening the tools screen
- Click on the "New" button and give a name to the new toolbar
- In the “Tools” tab, select the desired group of icons
- Select the tools in the list and drag and drop them on the new toolbar

Saving a customized toolbar

Check the box “Save user customized toolbar” in the “Tools – Options – General” screen for restoring the customized toolbar at each work session.

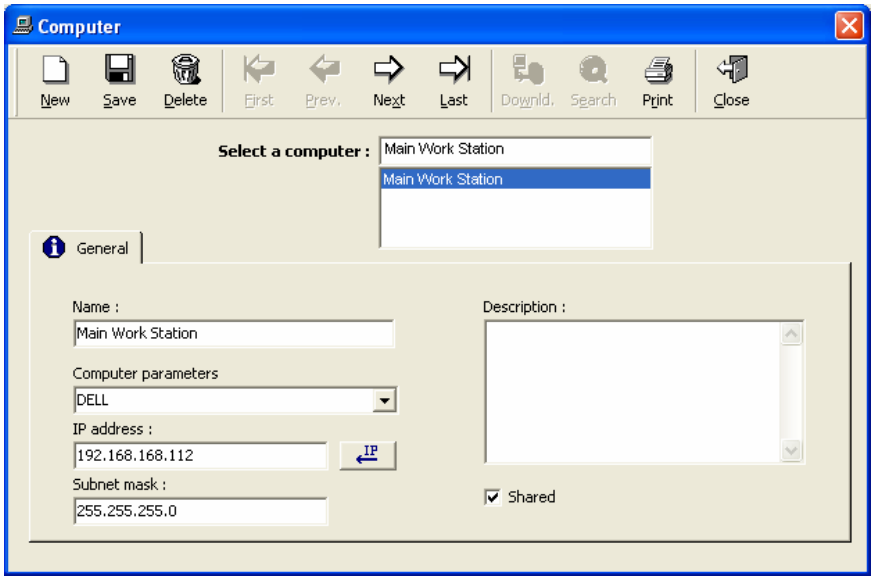
Toolbar initialisation

To execute this command, click on the “Reset toolbar to original state” button in the ‘’Tool - Options - General’’ screen.

3. “Parameter” MENU

3.1. Computer

If PRONET PLUS is installed on a single computer, ignore this screen. For Server/Workstation(s) architecture, use this screen to define all computers parameters, Server and Workstations (PC name as defined in the network with its IP address). A separate record must be created for the Server and for each Workstation.



Fields

Name: Name the computer (any name: for information only)

Computer Parameters: Select from the list the name of the computer (within the network).

IP address: Enter the IP address of the computer or click on the **[IP] button** for an automatic detection.

Subnet mask: Type the subnet mask. This allows to create workstations located on a different network segment, i.e., over routers.

Description: Describe the new item (for information only).

Shared: Check the box for sharing the information between different companies (for use with multi-company application ONLY).

3.2. Controller Network

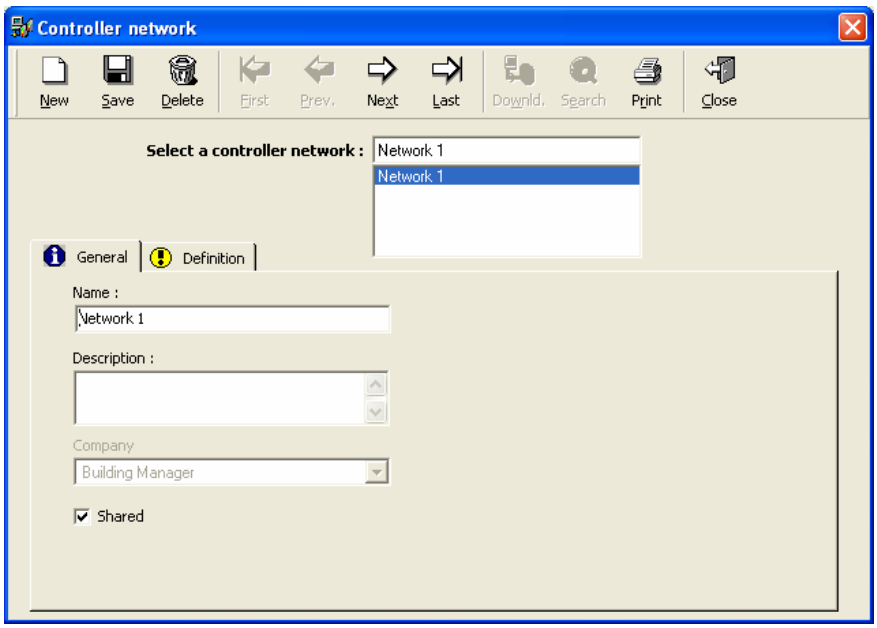
A network is an electrical physical support - or bus - to which controllers are connected and which can be connected to a PC. The different networks, to which groups of controllers are connected, are defined in this screen.

The PC can be connected to the networks by its communication ports (one by network), by its Ethernet TCP/IP board (for LAN or WAN network) or by Modem.

The controller network parameters are divided into two tabs:

- General, for name and description
- Definition, for selection of the different parameters

3.2.1. Controller Network - General



Fields

Name: Name the new network

Description: Describe the new data entry

Company: Company the item refers to (for use with multi-company application ONLY).

Shared: Check the box for sharing the information between different companies (for use with multi-company application ONLY).

3.2.2. Controller Network - Definition

Three network types are recognised by the system: Port COM, Port TCP and Port MODEM.

For each kind of network the following fields may be defined:

Password: This password allows to secure the data traffic between the PC and the controllers by encoding the information that passes over the communication bus (whether serial or TCP/IP). Each controller network may have a user defined 32-bit password, written in hexadecimal characters. When the PC and the controllers communicate, each data packet is encrypted using this password, preventing a hacker that has a copy of PRONET PLUS application from accessing the controllers. The password can be defined after checking the 'Password' box in this screen. The user can use decimal digits or a combination of decimal and hexadecimal characters.

Example: 1A E3 5F 7B (Min. value: 01 00 00 00 / Max value: 7F FF FF FF)

Time out delay: The maximum delay, measured in milliseconds, beyond which a controller must answer to a command sent by PRONET PLUS. If the controller does not answer within this delay, PRONET PLUS will try two more times (value adjustable in the 'Tools – Options – Communication' menu) to send the command. If still no answer from the controller, the command will be put in the pending commands. The default value is 1000 msec. (keep this value unless specified otherwise)

Time out polling: Polling a controller means asking it if some events just occurred, i.e. either a card transaction (granted or denied) or an alarm. In the polling mode, PRONET PLUS continuously polls all the controllers which must answer either by an empty message, if nothing happened, or by the last event(s) occurred. The 'Time out polling' is the maximum delay, measured in milliseconds, beyond which a controller must answer to a polling. If the controller does not answer within this delay, PRONET PLUS will try two more times to poll it. If still no answer from the controller, it will jump to the next controller. The default value is 1000 msec. (keep this value unless specified otherwise)

PRONET PLUS will declare a Communication problem if a same controller does not answer to polling during a pre-defined 'communication error time-out' delay.

The number of trials (3 by default) PRONET PLUS will poll a controller which does not answer and the 'communication error time-out' delay (30 seconds by default) is adjustable in the 'Tools – Options – Communication' menu.

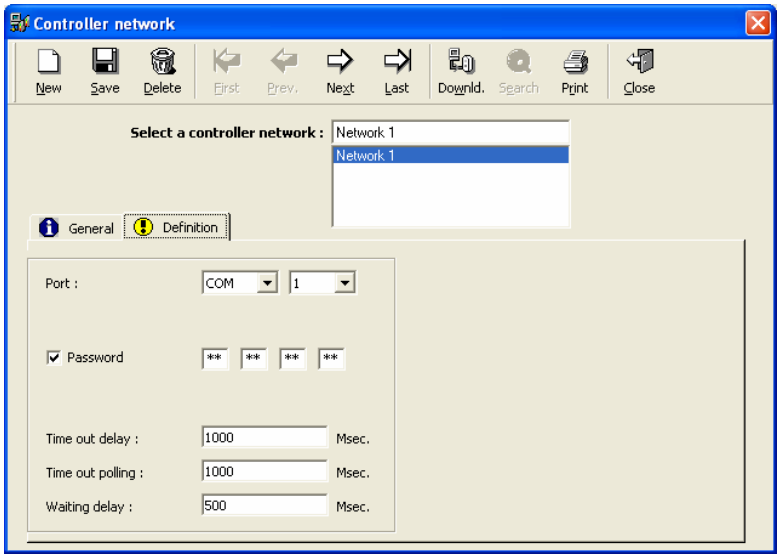
Waiting delay: Specify the delay between two communication operations between the computer and the controllers (polling or commands) - measured in milliseconds. This function will help slow down the system so as to free up the PC. The default value is 50 msec. (keep this value unless specified otherwise)

Note: The communication baud rate between controllers and PRONET PLUS is defined in the 'Tools – Options – Communication' screen.

3.2.2.1. COM Network

Fields

Port: Choose “COM” and specify the port address; by default the serial port COM 1 is created.

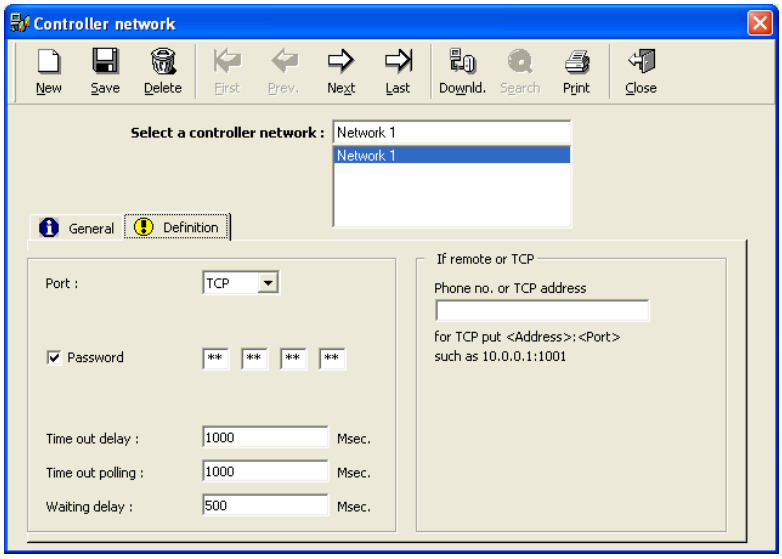


3.2.2.2. TCP Network

Fields

Port: Select “TCP” to establish a link to remote controllers via TCP/IP

Phone No. or TCP address: Specify the TCP address requested in the format <Address>**:**<Port>, for example: 10.0.0.1:10001



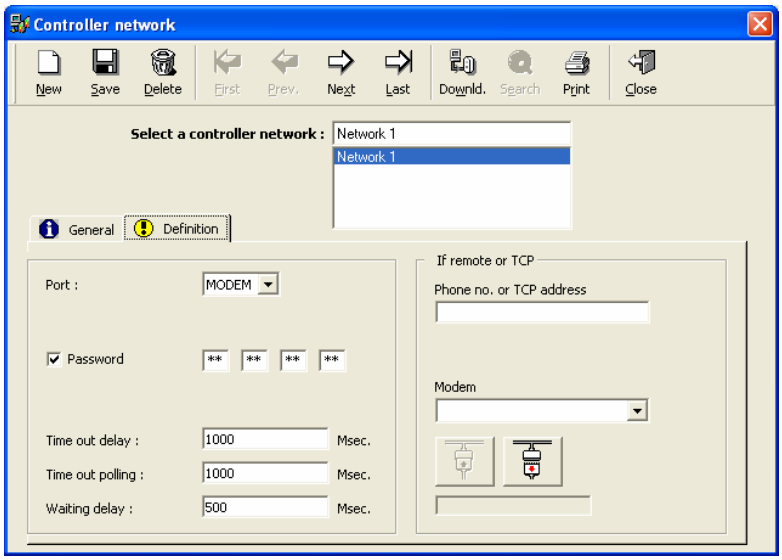
3.2.2.3. Modem Network

Fields

Port: Select “Modem” to establish a link to remote controllers via modem

Phone No. or TCP address: Specify the phone number of the modem requested

Modem: Select the required modem among the drop-down list showing the current Windows pre-defined connections.



Note:

- Set the remote modem in auto answer mode
- Fit the specific wiring and settings to installation instructions of controllers
- Establish modem port selection at the server

Connect: Click on the connect button to start the connection procedure; this button is enable after saving the network definition only.

The server application will show messages such as “Proceeding”, “Line Busy” or “Connected”.

The connect button is available on any workstation of the system, nevertheless the status messages are only sent to the server computer.

Disconnect: Click to stop the connection procedure; this button is only enabled while the controller network is connected.

Note: In case of off-line network, all the controllers are considered as inactive by the system. Database modifications are saved and automatically transferred during the next successful connection.

Tips & Notes

Updating dial up controllers

When a remote controller network is connected via dial up modem, and the user makes changes in the database while these networks are not connected, there are 3 ways of updating controllers with the new definitions:

1. Manually: Open Controller Network screen and connect to the relevant network. Once connected, all pending commands are sent to the controller, and in addition, the events buffer is uploaded to the PC.

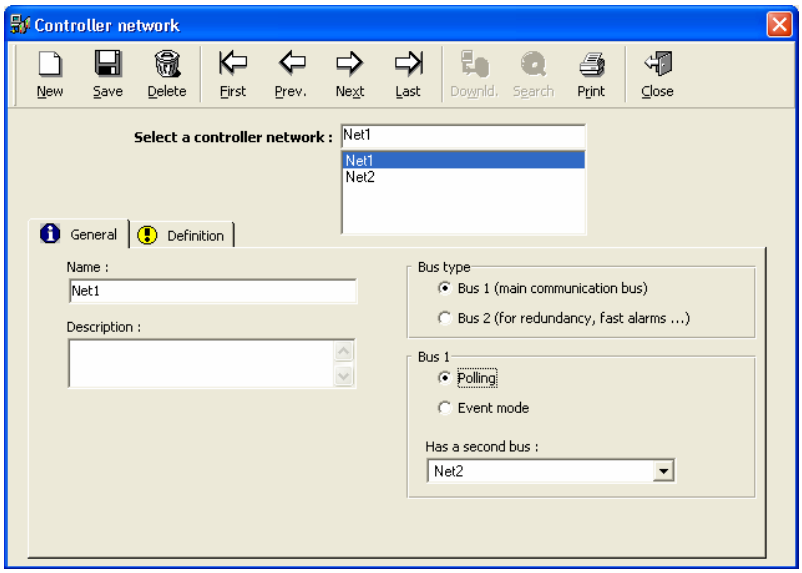
2. By user defined schedule: Modem dial-up may be automatically performed within pre-defined schedules. Define a new action and select the type: “Connect distant network and read transactions”. Select the relevant remote controller network. Save. Click “Make it a process”. Define a new global reflex. Select the type “Scheduler” and select the relevant time and dates. For example: Any day, any month, at 23:00. Select the newly created process. Save. This will make the program dial up that modem every night at 23:00, update the pending commands, read the events, and disconnect.

3. Automatic dial up every time there pending are to be sent: When a local controller does not answer to controller commands, (usually due to a communication problem), these commands are left as pendings and sent, by default, every half an hour minutes. (That 30 minutes period may be changed, down to a minimum of 1 minute, though Tools - Options - Communication - Resend pending every…). In order to set the application to update pendings, (at the same method and at the same delay), also remote dial up networks, it is required to choose the “Distant connect on pending” option in the “Tools - Options - Communication” screen.

Note: When this option is activated, the AM5 would not dial up every pending updates period to all remote controllers, but only to those who have to be updated with database changes. Therefore, if a certain controller does not have to be updated, AM5 will not connect to it and would not empty its buffer. (See the paragraph which explains what happens when buffer is full on remote controller).

3.2.3. Controller Network, advanced settings.

Pressing Shift+F12 at the “Controller Network” screen reveals on the “General” tab some advanced features about communication bus:



Fields

Bus type: Select the network type:

- **Bus 1 (main communication bus)** (default)
- **Bus 2 (for redundancy, fast alarms …)**: Network connecting the controller secondary communication ports.

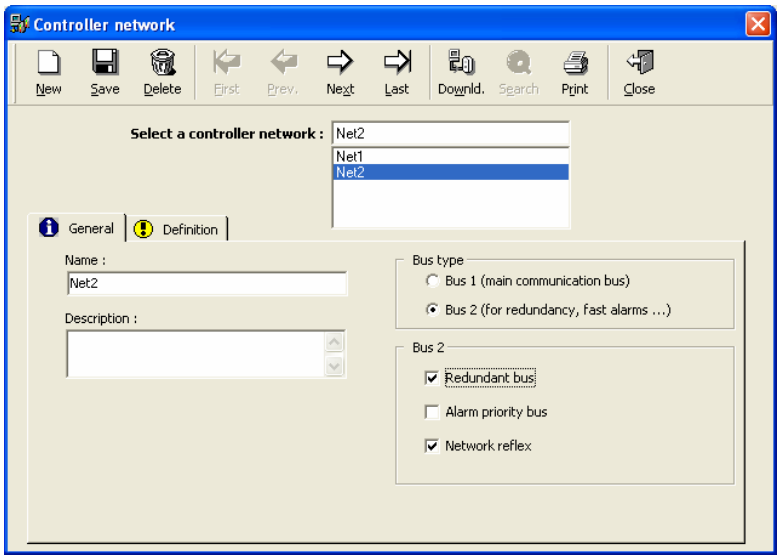
Bus 1: When the Controller Network is defined as Bus 1, this bus must be connected to serial port 1 of all the controllers. This bus may be set to one of the 2 communication types:

- **Polling**: In this type of communication (selected by default), the PC continuously polls the controllers, in order to check if there are any new events to be reported.
- **Event mode**: In this type communication, the PC listens quietly to the port, waiting for the controller(s) messages. There is no polling, the events are being sent at the controller’s initiative. As soon as access or alarm event happens, the controller reports it to the PC. Obviously, the communication lines are much less busy.

  Notes for technicians*:* Unlike polling mode, where the 2 onboard controller communication LEDS work continuously, in event mode they would just blink briefly after an event has occurred.

Has a second bus: Select the second bus, if needed. This bus must have been defined as Bus 2 preliminarily.

By pressing on the ‘Bus 2’ button, other fields are displayed. For the TPL Rev.D, Rev.D1, and the DS216 Rev.C it is optional to support a secondary RS485 communication port called ‘Bus2’. This additional port can be connected to a bus that may be used as redundant bus, alarm priority bus or network reflex bus:



Fields

Bus 2: When the Controller Network is defined as ‘Bus 2’, this bus must be connected to the secondary serial port (Connector J10) of all the controllers equipped with a second RS485 communication port. ((U29) and (U30) components must be present on the controller board).

This bus may have three different uses. Check the option box for which this bus must be used:

- **Redundant bus**: Backup communication bus for acting as an alternative communication bus for the controller in case of main communication port failure (connected to a TCP/IP network, for example). If this option is set, then when the PRONET PLUS detects a communication error with one or more controllers of the network, it swaps the communication of all the controllers of that network to ‘Bus 2’. This change is done after the ‘Communication error time out’ delay (30 sec. by default, changeable in the “Tools - Options - Communication” screen). At that point the communication will continue on the secondary bus. However, maximum 5 minutes later, PRONET PLUS will test the main bus: if all the controllers answer, the main bus is automatically restored; otherwise, communication will continue on the ‘Bus 2’ for another 5 minutes. ***This feature is required the use of EPROM TPL from 03/09/2002 or later.***

- **Alarm priority bus**: Bus dedicated to alarms. During this mode, the controller ACTIVELY sends all the alarm events immediately as they occur, without waiting to be 'polled' by the PC. Therefore, the user can receive the alarm messages as soon as they happen, EVEN when the controller buffer is still load with thousands of access, and other, events. This bus runs in Event mode only (mode previously defined). Controller may be connected simultaneously to the same PC via its two communication ports: cardholder transactions are transferred to the PC through Bus 1 (either serial or TCP) connected to the main controller communication port while alarm events are transferred to the PC through Bus 2 (either serial or TCP) connected to the second controller communication port. ***This feature is required the use of EPROM TPL from 01/03/2003 or later.*** A simple test can be applied by disconnecting the main controller port and see that alarms event are still received. You may notice that the PRONET PLUS aACTEC 2 asterisks (**) before each event sent in event mode.

  Example: **21/08/05 17:53:47 ** Start of Alarm From input 'Input1 / Controller 1'**

  Note 1: What is "Alarms Priority Bus" good for?

  During polling mode, transactions are sent to the computer only after an answer to a polling interrogation. Without polling (due to power cut, PC or LAN failure, etc.), transactions are not sent and are recorded in the FIFO events buffer. When communication and polling are back, transactions are sent in the order they were recorded ('FIFO'=First In, First Out) and therefore, newly arrived alarms are sent only after all the transactions previously recorded have been sent, and this might take few precious minutes if the controller events buffer is loaded with few thousands of events.

  Another case, in the installations with numerous controllers, the regular FIFO system forces new alarm messages to wait until their turn arrives. This may take time when the controller event buffer is loaded with events.

  The "Alarms Priority Bus" comes to help exactly at this point. With the "Alarms Priority Bus" alarms do not have to wait till the PC finish reading the events previous in the queue – but rather reach the PC as soon as they are created, using the 2nd bus as a shortcut route to bypass all the old events.

  Note 2: In case the alarm priority bus goes over TCP/IP it is required to remove the time connection timeout (in Tibbo DS-Manager application set "Connection timeout = 0") otherwise the TCP socket will be automatically closed after 5 minutes without an alarm message.

- **Network reflex**: Communication bus that allows controllers to perform global reflexes between themselves, without a PC. These reflexes are defined in the "Global Reflex - General" screen. The controller will execute the network reflexes through this second bus, even at times when the PC is not running. ***This feature is required the use of EPROM TPL from 01/03/2003 or later.***

Note: Check list : Before setting/testing the Bus 2, make sure that:

- The needed hardware components and the corresponding firmware date are installed.
- There is a RS485 wiring on Bus 2.
- Bus 2 is defined to perform Redundant bus, Alarm priority bus or Network Reflexes
- Bus 1 is linked in the software to Bus 2 (i.e., on Bus 1 definition, Bus 2 appears at the 'Has a second bus' field).
- At the "Controller - General" screen, the network of all the corresponding controllers is Bus 1.

3.3. Controller

A controller is an electronic card that has a huge memory capacity for storing the parameters monitored, such as cardholders, time zones, reflexes, etc. It supervises the following components of the security system:

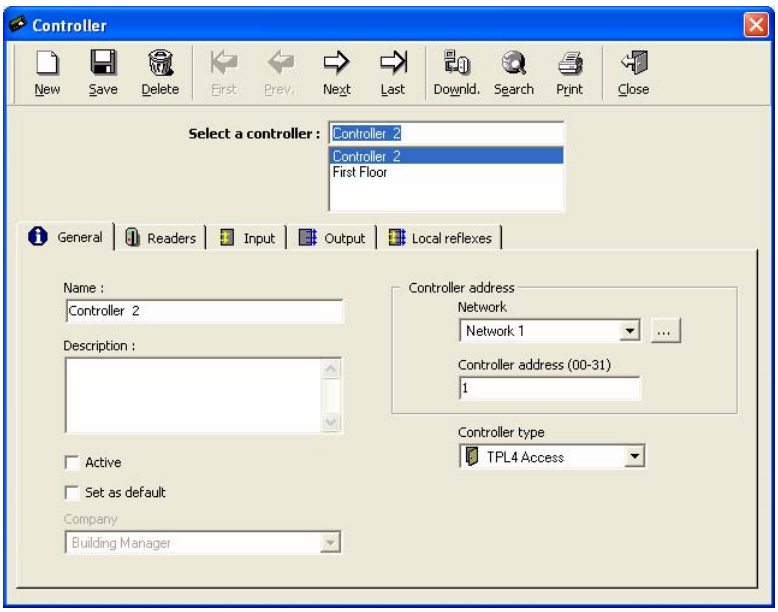
- Readers, and consequently the corresponding doors
- Inputs (Alarm, RTX buttons, etc.)
- Outputs relays

Information regarding controllers is organized into 5 tabs:

- General tab
- Readers tab
- Input tab
- Output tab
- Local reflexes tab

3.3.1. Controller - General

The “Parameter - Controller - General” menu allows to define the controller parameters in the system.



Fields

Name: The following names appear by default: Controller 1, Controller 2, etc. Modify the default name by a name linked to the geographical position of the controller or to the department it monitors. In case the controller monitors many readers at a time, the name chosen must be logical. Examples: main entrance, stairs –1, parking 2, R&D

Description: Describe the new data entry

Active: ☑: to activate communication (parameters download and polling) with the controller.

☐: to disengage communication between the PC and the controller. Polling is not done in this case; the controller is not polled and is not downloaded by the system.

Set as default: Check the box if the current controller should serve as a reference. Its parameters are automatically copied as default parameters for newly created controllers, thus preventing to have to parameter newly created future controllers.

Company: Company the item refers to (for use with multi-company application ONLY).

Controller address:

Network: Select an existing network from a list of previously defined networks or create a new network by clicking on the **[…] button**.

Controller address (00-31): Mention the physical address of the controller in the selected network. The address is contained between 00 and 31; it is defined on the controller itself by the position of the address selection dip switches.

Controller type: Select the type of controller in the displayed list. This will enable PRONET PLUS to set all the parameters (readers, inputs and outputs) with their default values, according to the type selected.

Tips & Notes

Saving and downloading

Saving the data entered will automatically result in downloading initialisation data, updating date and hour and transfering group parameters, daily and weekly programs for access, reader parameters, card format and access authorizations.

Parameters by default

When entering information with respect to name, network, address and controller type, the system will define all the other controller parameters (readers, inputs and outputs) by default which therefore do not need to be entered if these default values are convenient.

ACNET PRO 4X4 parking controllers

In the case of ACNET PRO 4X4(D4) or ACNET PRO 4X4(D4) 16-relay parking controllers (2 and 4-door), select the requested parking in the field that appears at the bottom of the screen.

ACNET PRO 4X4 lift & ACNET PRO 4X4 D4 lift

A single controller can pilot several lifts independently.

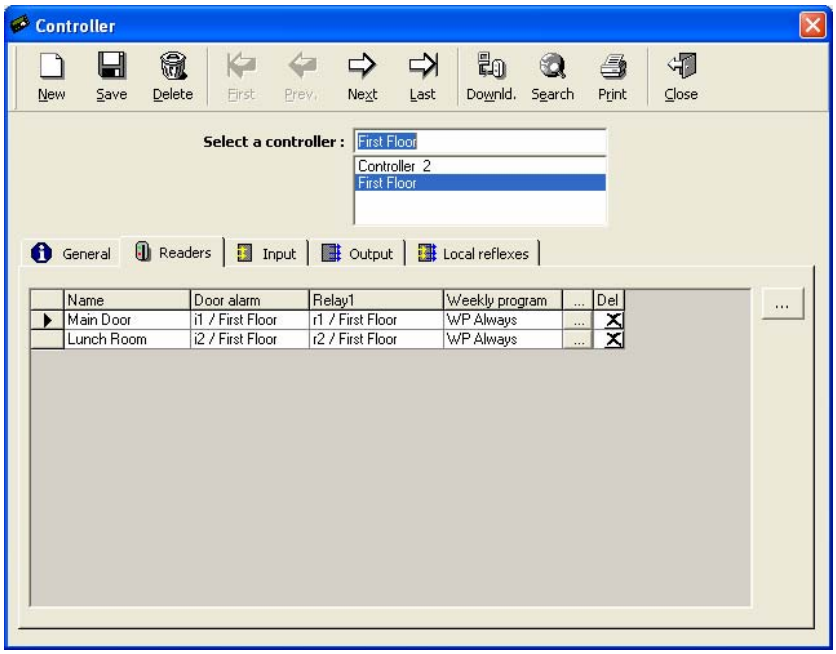
Types of controllers and associated readers, inputs and outputs

Type of controller	Doors	Readers	Inputs	Outputs	Notes
ACNET PRO 4X4 Access	2	2	8	4	Access control
ACNET PRO 4X4 parking	2	2	8	4	Access control in parking
ACNET PRO 4X4 parking 16 relays	2	2	8	16	Access control in parking
ACNET PRO 4X4 lift	2	2	8	64	Lift monitoring
ACNET PRO 4X4D4 Access	4	4	16	8	Access control
ACNET PRO 4X4D4 parking	4	4	16	8	Access control in parking
ACNET PRO 4X4D4 parking 16 relays	4	4	8	16	Access control in parking
ACNET PRO 4X4D4 lift	4	4	8	64	Lift monitoring
NSL4	2	2	4	3	Access control
DS216	-	-	24	4	Alarm control

3.3.2. Controller - Readers

The informative table synthesizes reader parameters that are associated to a controller. Default parameters are defined according to the type of controller. To obtain full information and modify the reader data, click on the **[…] button** situated to the right of the table of the corresponding tab.

Table analysis



Name: Reader name

Door alarm: Name of the input signalling the closure of a door

Relay 1: Name of the first output in the system

Weekly program: Weekly program that automatically flip-flops the way the reader operates between the two security levels

Button […] (on the line of the reader): Click on the button to display the "Reader" screen for creating, consulting or modifying data

Button [×] (on the line of the reader): Click on this button to remove a reader from the line

Button […] (outside the table): Click on the button to display the "Reader" screen even if no record is selected

Tips & Notes

Modifying default parameters

Suppress readers that automatically appear in the table and are not physically connected. If the default parameters of a reader are not suitable, eliminate the reader from the list and manually create a new data entry. In case of an empty list, click on the **[…] button** to create a reader.

Saving current information

As soon as a new tab is selected all the current information is saved.

Table of default connections for inputs, relays and RTX:

	Reader 1	Reader 2	Reader 3	Reader 4
Door alarm	i1	i2	i5	i6
Door relay	r1	r2	r3	r4
RTX	i3	i4	i7	i8

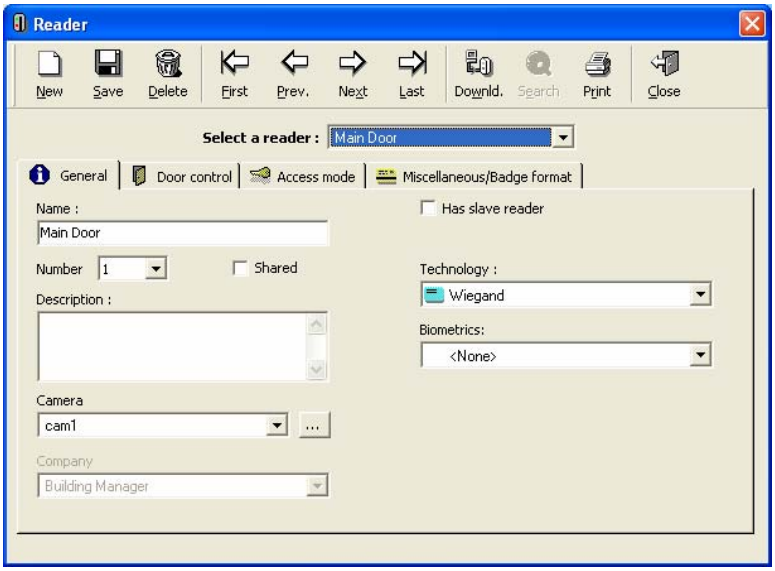
3.3.2.1. Controller - Readers - General

The “Reader” screen enables the reader parameters specification. It is accessible from the corresponding tab in the “Controller” screen, by pressing on the **[…] button** situated to the right of the table.

Reader parameters are divided into five categories:

- General tab
- Door control tab
- Access mode tab
- Miscellaneous / Badge format tab
- Finger Print tab (if a biometric reader is selected)

Fields



Name: Name the reader

Number: Indicate the number of the reader (choose from 1 to 2 for a two doors controller, and from 1 to 4 for a four doors controller).

Shared: Check the box for sharing the information between different companies (for use with multi-company application ONLY).

Description: Describe the new data entry

Camera: Select the camera video to associate with this reader, if needed (for use with the Video Module ONLY).

Company: Company the item refers to (for use with multi-company application ONLY).

Has a slave reader: Check the box; if checked, specify the name of the slave reader.

Note: When a reader is deleted its slave reader is also deleted.

Technology: Select the reading technology from the displayed list (Magnetic, Wiegand, etc.)

The information downloaded to the readers is limited to the badges which have the same technology as specified above. The badge technology is specified in the “Type” field in the “Parameter - Badge” screen.

Note on Badge Technology: A badge, or card, is a physical support that has a unique code enabling its identification. Generally, this code is randomly attributed and unknown to the user. Badges identification requires the registration of their code in the system memory. When a badge is being read the system checks if the badge is known and if yes, to whom it is attributed, for checking the access authorization of the cardholder.

Numerous card technologies are available: magnetic, bar code, Wiegand, proximity, smart cards, etc. PRONET PLUS, as well as ACTEC controllers, is compatible with the majority of reader technologies on the market today.

The reading technology is defined in the “Controller – Reader - General” screen and badges technology is defined in the “Parameter - Badge" screen. The technology must be the same as the one selected on the controller electronic board through its technology selection jumpers.

Biometrics: If the reader is a biometric reader, select its type from the displayed list (BioPass, etc.).

Tips & Notes

Motorized Reader

It is possible to use the ACTEC magnetic motorized readers by selecting the 'Motorized Reader' technology in this screen. Two additional fields are displayed: in the first, select the controller input connected to the badge detection signal (S1). In the second, select the controller relay to which the Common is connected to the signal (MFC/MRC) that controls the sense of the reader motor.

'Wiegand', 'Wiegand 2' and 'Wiegand Keypad' Technologies

When several readers are defined with a same technology, they must have the same badge format. If some readers need a different format from the current badge format (i.e. a different Wiegand format), their technology must be different and they must be connected on a different controller.

The Wiegand reader technologies ('Wiegand', 'Wiegand 2' and 'Wiegand Keypad') allow to choose up to three different Wiegand format type. This helps for instance on sites where one or more controllers support biometric readers and other controllers support other Wiegand readers.

Example:

A site has 2 readers; each one is connected on a different controller:

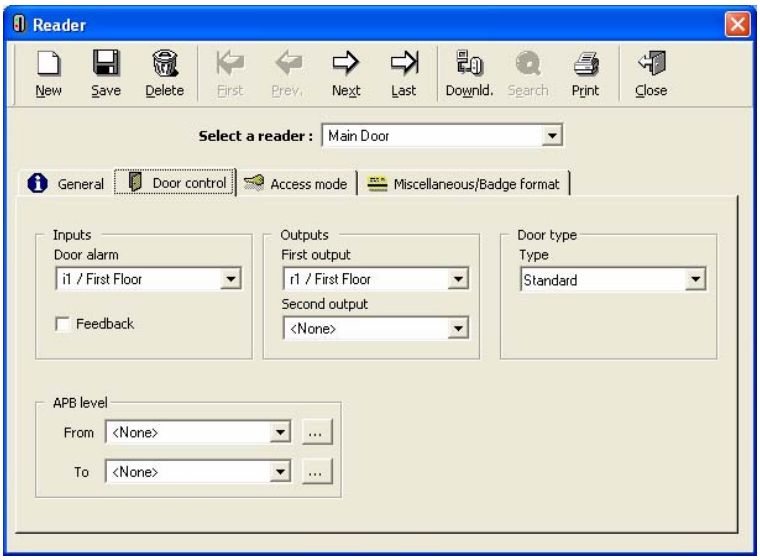
- Reader 1 / Controller 1 is a Bio-pass,
- Reader 1 / Controller 2 is a simple Wiegand reader.

	Defined Technology	Biometrics	Badge Format
Reader 1 / Controller 1	Wiegand	BioPass	Decimal
Reader 1 / Controller 2	Wiegand2	-	Decimal

In this case, if a cardholder needs to pass on **both readers**, he may have **two badges**: one 'Wiegand' badge (to be used on the BioPass reader defined as "Wiegand") and one 'Wiegand2' badge (for the other reader defined accordingly). The PC will download cards of a defined technology only to readers of the same technology. Wiegand cards to Wiegand readers, Wiegand2 cards to Wiegand2 readers, etc.

3.3.2.2. Controller - Readers - Door Control

This screen defines the way the door is wired



Fields

Inputs:

Door alarm: Select the controller input to which the door opening control device is wired; an alarm is set off when a door is forced or stays open beyond a predefined delay

Feedback: Check the box in order to verify the physical entry or exit of a badge holder that has been granted access

Operation mode: A badge holder swipes his badge through a reader. The controller authorizes access to the badge holder by activating a door relay. During the predefined door alarm delay, during which the door can be opened, the controller goes into a waiting mode. If the door has been opened and closed - as will attest the door opening control device activation - the badge holder is supposed to have passed and the controller records the access transaction in memory. If the door has not been opened, the door opening control device is not activated and the controller records the transaction “access refused” in memory.

APB level (for Global Anti-Passback function):

From: Select a reader APB level to be the ‘Previous level’ of the reader from the list or click on the **[…] button** to define a new APB level

To: select a reader APB level to be the ‘Actual level’ of the reader from the list or click on the **[…] button** to define a new APB level

Operation mode: See the Global Anti-Passback function in the next paragraph.

Outputs:

First and Second Outputs: Select the relays to be activated upon a granted access.

Door type: Select from the list:

- **Standard**: Access is granted if badge is authorized
- **Controlled by Input**: A door is controlled by the status of an input. Specify the input in question in the ‘Controlled by’ field. the door opens if the input is inactive but remains closed if the input is active. (If, for example, the input selected is a second door alarm input, the door will be opened only if this second door is closed)
- **Man Trap 1, 3, 4**: Select if the doors operate in the man trap mode, which means that the passage through two consecutive doors is a requisite in order to access a site.
- **Manually Controlled**: Access is manually regulated

Note on the Mantrap mode:

The man trap mode supervises the activation process of a double door entrance. The first door opening and the possible activation of an input are the conditions for the opening of a second door.

PRONET PLUS supervises three types of man traps:

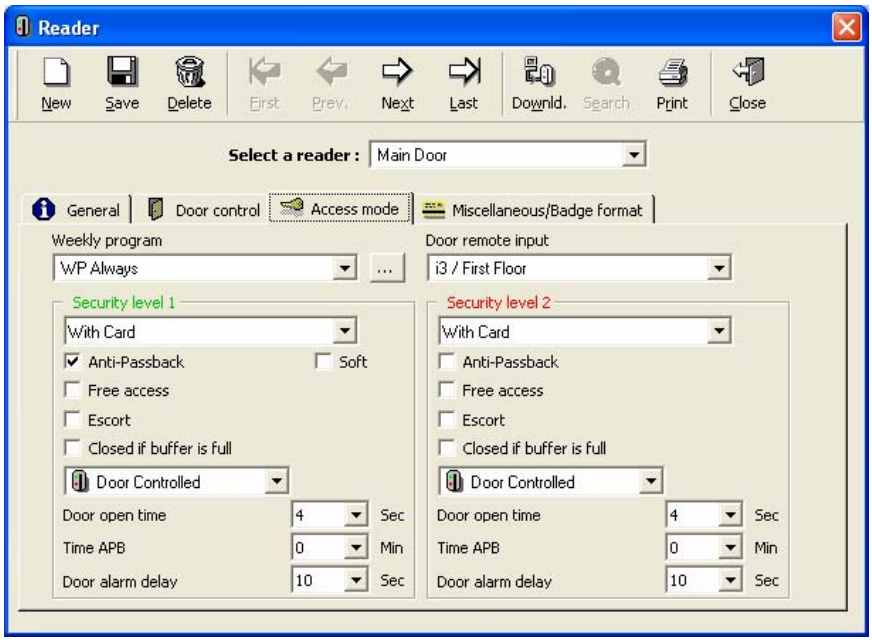
- **Man trap 1**: The first door will open only if the second door is closed. Both readers of a same controller monitor two doors (reader 1 with reader 2 or reader 3 with reader 4). The door of each reader must be defined as 'Man trap 1'. When access is granted at a reader, this reader is locked untill the personn passes through the second door. The door opening control device status attests to the opening or closure of doors.
- **Man trap 3:** The second door opens automatically following the opening and closure of the first door. Both readers of a same controller monitor two doors (reader 1 with reader 2 or reader 3 with reader 4). The door of each reader must be defined as 'Man trap 3'. When the first door opens and closes the second door automatically opens. The door opening control device status attests to the opening or closure of doors.
- **Man trap 4:** The second door automatically opens consecutively to the following two conditions:

  Opening and closure of the first door and
  Receipt of a signal - activation of an input

  Both readers of a same controller monitor two doors (reader 1 with reader 2 or reader 3 with reader 4). The door of each reader must be defined as 'Man trap 4'. When the first door opens and closes, and a predefined input is activated, the second door opens automatically. The required input must be defined in the 'Controleld by' field. The door opening control device status attests to the opening or closure of doors.

3.3.2.3. Controller - Readers - Access Mode

The reader can operate differently according to predetermined time zones. The parameters of these two operation modes - or security levels - are defined in this screen.



Example

During office hours, access is freely granted (no need to swipe a badge). After office hours, badges need to be swiped (controlled door).

Fields

Weekly program: Choose the weekly program that automatically flip-flops the reader functioning mode between the two security levels. The default weekly program is always associated with security level Number 1. Click on the **[…] button** to create or modify the weekly program

Door remote input: Select the controller input to which the Request to Exit device (RTX) is wired (see in this chapter the Table of default connections for inputs, relays and RTX)

Security level 1 and 2: (must be filled out separately for both access modes)

Access authorization: Define the way in which the authorization access must be required:

- **With Card**, through the reader
- **With Keypad**, for the entry of a PIN code (Personal identification number)
- **With Card OR Keypad**
- **With Card AND Keypad**

Anti-Passback & Time APB: (use with the "Feedback" option)

- Local Anti-Passback: The Local Anti-Passback feature provides a mean of stopping a card from being used for successive entries without a valid exit, or vice-versa.

For example, when two readers are connected to control the same door, entrance/exit (Reader 1/3 control entrance/exit of door 1 and reader 2/4 control entrance/exit of door 2), the same card will not be accepted twice successively at the same reader. It has to be passed once at one reader (i.e. entrance) and once at the second reader (i.e. exit). This prevents a person, who has been granted access, to give his card to somebody else that will try to access immediately after the first person.

To activate the Local Anti-Passback, check the Anti-Passback box and leave empty the fields 'From' and 'To' of the 'APB level' in the 'Reader – Door Control' screen.

- Time Anti-Passback: also called "lock out delay", this feature prevents a card to be granted access twice at a same reader in a pre-defined delay of time. A second access will only be authorized after the lockout delay.

To activate the Time Anti-Passback, fill the 'Time APB' field with the lockout delay (between 1 and 15 minutes) as required. For activating in the same time the Local Anti-Passback feature, check the Anti-Passback box.

- Global Anti-Passback: defines a path that cardholders must follow to access specific locations. The facilities is divided into levels and each reader allows to pass from a level ("previous level") to the next one ("actual level"). When the feature is active, the controller will grant access only to cardholders who are coming from the zone classified "previous level". Once access is given, the cardholder will be located in the "actual level" zone. ***Because the new cardholder level is updated in all controllers by PRONET PLUS as soon as it receives the access transaction, the PC must be on-line when this feature is used.***

Examples:

- Enforce discipline by having cardholders passing through a main entrance checkpoint before they go to their respective offices.
- Prevent a second person (or car) from entering with an authorized one: it will be stopped at the next checkpoint because not registered at the previous level.

To activate the Global Anti-Passback, check the Anti-Passback box and fill the fields 'From' and 'To' with the previous level and the next level as required, in the 'APB level' section of the 'Reader – Door control' screen.

- Soft Anti-Passback (requires special controller firmware): When a cardholder requests to access a second time from a same reader which is defined in Anti-Passback mode, the controller denies the access AND reports the event as “Access Denied - Anti-Passback”. With the Soft Anti-Passback mode, the controller *grants* the access and only reports the event.

Before setting the Soft Anti-PassBack:
1. Verifying with your vendor that the controller firmware supports this feature.
2. Check the Soft Anti-PassBack box on the “Tools – Options – Server” screen.

To activate the Soft Anti-PassBack, checking the “Anti-Passback” box will reveal the “Soft” option. Checking that box would apply the Soft Anti-PassBack to that reader. When Soft Anti-PassBack is selected – it applies at ALL times when the Anti-Pass back works, i.e., it is not possible to have full Anti-PassBack on green periods and soft on red periods or vice versa.

Note: The Anti-Passback feature may however be cancelled for specific cardholders by selecting the ‘No APB, No timed Anti-Passback’ box in the ‘All cardholders – Personal’ screen. It can be also re-initialized in the ‘All cardholders – Location’ screen.

Free access: Select to grant unlimited access to all badge holders registered in the system without checking of their validation date or their access group

Escort: Select this function to require a double valid card reading - the cardholder who needs escort and his escort - to authorize access at the reader. The escort has 10 sec. to present his badge. The second escort may be any cardholder or a Supervisor only (see the ‘All cardholders – Personal’ chapter).

Close if buffer is full: Select this function to refuse access when the corresponding transaction cannot be registered in the system memory, because it is full. If this option is not selected, access is granted even if the buffer is full and, as a consequence, transactions are not recorded.

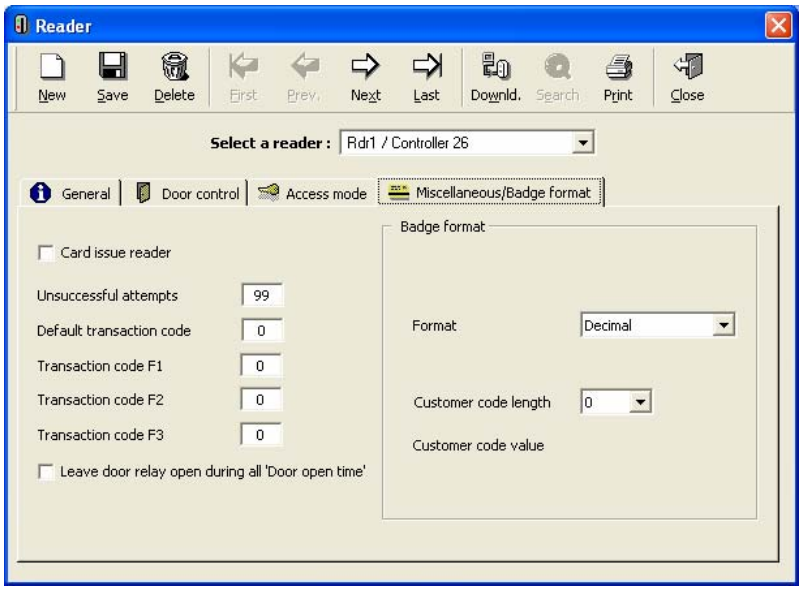
Door mode:
- **Door Open**: Access mode in which the door is permanently open
- **Door Closed**: Access mode in which the door is permanently closed; access is always refused even with valid badges
- **Door Controlled**: Standard access control mode, in which access depends on the badge and its authorizations

Door open time (from 0 to 120 seconds): Delay during which the badge holder has to pass through the door after receiving access authorization; it corresponds to the activation delay of the relay(s) which control the door.

Note: Alternated mode (Door open time set to 122): The door relay opens after the first valid swipe and stays open; the door relay closes only after a valid second badge reading and stays closed, and so on.

Door alarm delay (from 0 to 75 seconds, by multiples of 5): Delay during which the door must be closed; if the door is still open after this delay, a ‘Door left open Alarm’ is raised.

3.3.2.4. Controller - Readers - Miscellaneous/Badge Format



Fields

Card issue reader: Select this option to create new badges using a reader. ***If the reader is in the card issue reader mode, it cannot be used for access control purposes.***

The card issue reader is generally situated close to the computer. When a badge is read, its code is directly transmit to the PC for recording purpose, without any authorization checks, and this to prevent the small waiting delay this check may take.

Unsuccessful attempts: specify the number of successive unsuccessful attempts tolerated by the system before an alarm is raised; choose a number from 00 to 99

Default Transaction code: specify the transaction code sent by the controller to the PC when an access is granted; the user via the reader keypad can modify this code

Transaction code F1, F2, F3: attribute a specific transaction code to the keypad function keys (if exist). This code is sent when access is granted and the function key was used.

Note: Pre-defined action(s) may be triggered by PRONET PLUS upon reception of specific transaction codes. (Refer to 'Global Reflex' Chapter)

Leave door relay open during all "Door Open Time": If not selected (by default), the controller deactivates the door relay as soon as it detects (through the door contact device) that the door has been opened. Selecting this option will leave the relay activated during the door open time.

Badge Format Fields: There are various formats of magnetic, bar code and Wiegand technologies. By default the system reads the first 8 encoded numbers on magnetic or bar code badges or the 8 hexadecimal digits of a Wiegand badge but this way of reading can be modified. These fields allow to change this badge format.

Controllers may recognize many kind of badge technologies (Magnetic, Barcodes, Wiegand, etc…). The reading technology used must be specified in the 'Controller – Reader – General' screen.

Within a same technology, different formats may be defined through this 'Miscellaneous-Badge format' screen as described hereunder.

Magnetic and Barcode technologies:

When one of these technologies is selected in the 'Controller – Reader – General' screen, the following fields of the 'Controller - Readers - Miscellaneous/Badge Format' screen may be used to parameter the badge format (Card code position and Customer code, if needed).

Fields

System card: Card on which a four-digit number between 0001 and 9999 has been inscribed; since the card number is already on the badge, it enables immediate recognition of the badge holder and therefore, a system badge need not be recorded up in the system.

Card code position: The 'card code' is a unique code, which identifies the card. The system records card code of 8 digits only. A bar code or magnetic code may contain many numbers or characters; by default, the first 8 characters of the code are recorded as the 'card code'. It is possible however to read another 8-digit by specifying the position of the first one in the "Card Code Position" field (Value between 0 and 37, the default value 0 corresponds to the first encoded character).

Customer (or site) code: It is a same code, which appears on all the cards of a same company, besides the badge code; the use of a customer code value is optional and strengthens system security by identifying the company.

By the default this option is not used. To use it, fill out the following three fields:

- **Customer code position**: Specify the position of the first character of the code; choose a value between 0 and 37 (0 corresponds to the position of the first number encoded in the badge).
- **Customer code length**: Specify the size of the code to be read; choose a value between 1 and 7. Note that 0 is the default value, which means that the customer code value is not checked.
- **Customer code value**: Enter the customer code value into the squares that appear on the screen.

Wiegand technology:

When Wiegand technology is selected in the 'Controller – Reader – General' screen, different formats may be selected in the 'Controller - Readers - Miscellaneous/Badge Format' screen.

Fields

- **Hexadecimal**: 'Hexadecimal' format is selected by default. Many standards exist on the market. ACTEC controllers may read up to 50 bits Wiegand badges (Wiegand codes are read in a binary format), within 48 bits of data (12 hexadecimal digits) and 2 parity bits, as follows:

  E b_{47} ……. b b b b_0 O

  Where: **b_{47} … b_0** = 48 bits of data maximum (may be less) and **E,O** = 2 parity bits

  In this hexadecimal format, the system keeps as the 'card code' the 32 least significant bits of the data string (b_{31}…b_0), in other words the last 8 digits of the code, which may be hexadecimal.

Two parity bits are added to the card besides the badge code for confirmation of a proper reading. Most Wiegand standards use a similar algorithm to calculate these parity bits and this algorithm has been integrated into the ACTEC controllers. It is thus preferable to use it by selecting the corresponding jumpers on the controllers' electronic card.
However, certain card standards have original algorithm for the calculation of the parity bits. In order to enable these controllers to read these badges, the jumper position "no parity bits" must be selected. (See the controller installation manual for further details).

- **Wiegand 44**: 'Wiegand 44' format is a particular format of 44 bits, which includes 40 bits of data (10 hexadecimal digits) and 4 parity bits, as follows:

  $$\mathbf{b_{43} \ldots\ldots b_4\, b_3\, b_2\, b_1\, b_0}$$

  Where: $\mathbf{b_{43} \ldots b_4}$ = 40 bits of data and $\mathbf{b_3 \ldots b_0}$ = 4 parity bits.

  In this format, the system keeps as the 'card code' the 32 least significant bits of the data string ($b_{35}\ldots b_4$), in other words the last 8 digits of the code, which may be hexadecimal.

- **Decimal**: This format is a particular format, where badge code consists on a 5 digits decimal number (generally printed on the badge) sometimes associated with a 3 digits decimal code site. ACTEC controllers may read a 50 bits Wiegand string as in the hexadecimal format but convert the information in decimal as follows:

  $$\mathbf{E\ b_{47} \ldots\ldots b\ b\ b\ b_0\ O}$$

  Where: $\mathbf{b_{15} \ldots b_0}$ = 16 bits for 'card code', $\mathbf{b_{23} \ldots b_{16}}$ = 8 bits for 'site code' and **E,O** = 2 parity bits.

  In this format, the system keeps as the 'card code' the 16 least significant bits of the data string ($b_{15}\ldots b_0$), in other words the last 4 hexadecimal digits of the code, and converts them into a 5 digits decimal number, the unique code which identifies the card. In addition, the system converts the 8 previous bits of the data string ($b_{23}\ldots b_{16}$), in other words the 2 previous hexadecimal digits of the code, into a 3 digits decimal number which may be used as a 'site code', an identical code for all the cards of the site.

  If this site code has not to be checked, leave '0' in the **'Customer code length'** field. If this code has to be checked (and therefore is present in all the cards of the site), select the value '3' in this field and type the 3-digit code in the **'Customer code value'** field.

  For example: If the Wiegand hexadecimal code is **12AB08**, the site code is **018** (the decimal value of h12) and the Card code is **00043784** (the decimal value of hAB08).

- **Decimal 24 bits**: In this format, ACTEC controllers may read up to 50 bits Wiegand string and convert it in two decimal numbers as per the 'Decimal' format but the 3 digit site code is add to the first 5 digits code. The 3 digit Site code may or may not be checked as per the 'Decimal' format.

  For example: If the Wiegand hexadecimal code is **12AB08**, the site code is **018** (the decimal value of h12) and the Card code is **01843784** (43784 is the decimal value of hAB08).

3.3.2.5. Controller - Readers - Finger Print

This screen configurates the biometric readers. ***This tab will NOT be displayed if the reader has NOT been defined as a biometric reader,*** in the 'Controller - Reader - General' tab.

Note: Biometric readers received from ACTEC (from Bioscrypt technology) are pre-configured so they can be directly installed in a system managed by the PRONET PLUS application. This configuration is written on the back of each reader and is as follows:

- Type (BioFlex, BioProx, BioPass),
- Address (each manufactured reader has a unique address),
- Default baud rate is set to 38400bps,
- Port mode is set to "2". (I.e., the reader may communicate with the PC either through its Host port RS485, or via its Aux port in RS232).

If the biometric reader is not provided by ACTEC, the reader must be configured according to the mentioned configuration, through VeriAdmin (Bioscrypt software utility). In this case, once the unit is properly configured, it is important to check that the communication between this software and the reader is correct before using it with PRONET PLUS.

Operating Mode

Each biometric reader is connected to the system via 2 links simultaneously:

- One from its Wiegand OUT to the controller Wiegand IN (in order to send the cardholder code),
- One from its communication port (Host or Aux) to the PC (to receive configuration and templates).

➢ In the "Controller Network" screen, define the network on which the biometric reader is connected. Controllers and readers can communicate on the same bus, so this network can be an existing controller network. For TCP network, port **10001** must be used; this means that the TCP/RS485 interface must be configured with the port 10001.

Note: With a **BioPass** reader type, the "Waiting Delay" parameter of the network must be at least **500** msec.

➢ In the "Tools - Options - Communication" screen, select the Bioscrypt readers Baudrate. This baud rate can be different from the controllers baud rate. By default, the baud rate of the ACTEC biometric readers is **38400 bauds**. This is the default value indicated in the Options screen too.

Note: If the biometric readers network is a TCP type network, the controllers baud rate must be **identical** to the biometric readers baud rate (required to 38400).

➢ In the 'Controller - General' screen, select the controller on which the biometric reader is connected, click on the 'Reader' tab and open the "Reader" screen of the corresponding reader. In the 'Technology' field, choose '**Wiegand**' and in the 'Biometrics' field, select the required biometric reader type (the reader type is written at the back of the reader). For **BioFlex** readers with keypad, select the '**Wiegand Keypad**' Technology.

Note: It is recommended to give a reader name that includes the word 'bio' (like 'Bio Rdr1') to make the identification and future searches easy.

- Click on the 'Miscellaneous / Badge format' tab and select the badge format according to the cards in use. For BioPass readers (not using badges) and BioFlex readers with keypad, select the '**Decimal**' Format.

  Note: When several readers are defined with the same technology, they must have the same badge format. If some readers need a different format, their technology must be different (i.e. 'Wiegand 2') and they must be connected on a different controller.

- Click the 'Finger Print' tab and configure the current biometric reader by specifying the Reader communication network and the reader address (written on the back of the reader). Specify if the reader also serves for enrollment and set the Bio Wiegand format. For BioPass readers and BioFlex readers with keypad, select the '**Standard 26 bits**'.

  Note: On any given controller, all readers **must** be identical regarding the three following points: Technology, Badge format, Bio Wiegand format.

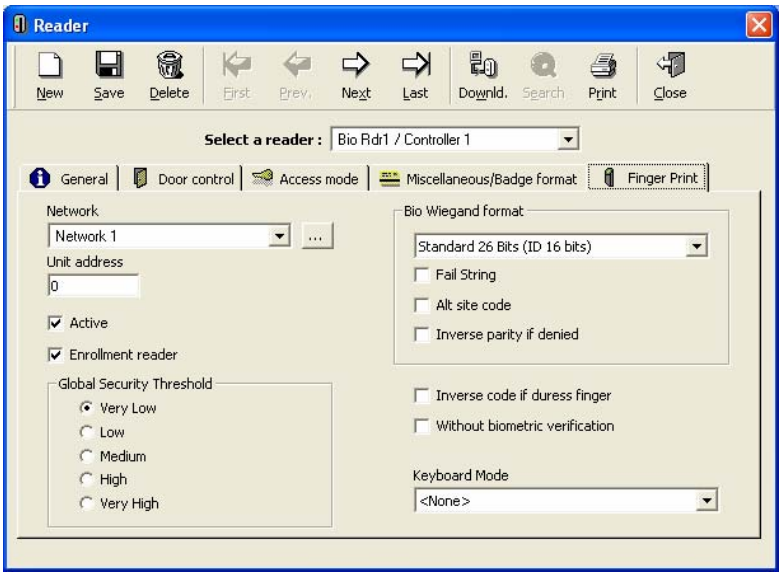
- Test the communication by opening the "Diagnose" screen ('F8' function key): click on the 'Biometric readers' button, on the right top of the screen, then on the + symbol located a the left of the network name and highlight the biometric reader created previously. The communication is established if a **V** is displayed next to the reader name. Then, on the right window, you can see the memory usage and the reader name with its address.

- In the "Parameter - All Cardholders - General" screen, create a cardholder and define his access authorization. Click on the 'Create new' button for creating a badge. Save.

  Note: To each cardholder, the system attributes two codes: the card code and the Bio ID code (or Bio template ID).

- From the "Parameter - All Cardholders - General" screen of this cardholder, press the 'Biometrics data' button. Select from the list the required enrollment reader and press the 'Enroll' button for a fingerprint enrollment. Follow the instructions displayed at the screen. Once the enrollment is finished, an image of the fingerprint template is displayed on the screen. To save it and to download it to the biometric readers, press 'Save'. After the template data is well received by the readers, the "Save" button is greyed out.

Fields



Network: Select the reader communication network or create a new network by clicking on the **[…] button**.

Unit address: Enter the biometric reader address (written on the back of the reader).

Active: Check this box if the reader is physically connected with the network. PRONET PLUS communicates only with the active readers.

Enrollment reader: Check this box if the reader also serves for enrollment.

Note: A biometric reader can act as an enrolment reader in addition to its normal function as a regular access reader.

Global security threshold: This parameter determines the reader security strictness (this option is not visible for BioPass readers).
Note: Since the verification process always uses the lower of the two security levels (the global one and the personal template one), a global setting of 'Very High' means that the verification threshold used will always be the one stored on the template. If the global threshold is set to 'Medium', the threshold used will never exceed medium.

Bio Wiegand Format: Select the Wiegand format in which the biometric reader sends the user code to the controller following a successful identification had been achieved. This format must be defined according to the badge format in use (26 bits, etc.). The default format is 'Standard 26 bit'. The three following options apply ***only to the standard Bio Wiegand format (not with Custom formats):***

- **Fail string Code**: Checking this box displays a text box through which the user can define a code that will be sent to the controller following a failed verification (i.e. wrong finger). This code should be a number from 1 to 65535. If this option is not checked then no code will be sent in case of biometric failures.
- **Alt Site code**: This option, when enabled, will cause the unit to replace the real Site Code (normally sent, in addition to the user code, as a part of the Wiegand string upon a successful verification) with the alternate Site Code specified in the edit box.
- **Invert Parity if denied**: Checking this option causes the biometric readers to send to the controllers a special code (card code with inverted parity bits) upon a fingerprint failed verification (i.e. the right badge with the wrong finger): PRONET PLUS will therefore be able to display the cardholder name of the rejected transaction. This option (not visible for BioPass readers) is ***only available on controllers where the 'Wiegand WITH parity check' option is enable (through the technology dip switches controller selection) with EPROM from 20/07//2004 or later.***

Inverse code if Duress Finger: The duress finger mode offers users a way to indicate a duress situation (such as when an employee cardholder is being forced to open a door). In this case the employee should identify himself to the system using a finger predesignated as a "duress finger". Each template can be specified as such by checking the 'Make Duress Finger' checkbox within the "Biometrics data" screen of a cardholder. When a successful verification occurs with such a template, the unit will perform the special action specified, such as reversing the Wiegand output to alert the door controller of the duress situation. The controller will grant the access and send to PRONET PLUS the event 'Access Granted (Duress Code)'. This option is available ***only if the Technology/Badge Format/Bio Wiegand Format is 'Wiegand/Hexadecimal/Standard 26 bits' and when the controllers are set to 'Wiegand WITHOUT parity check' option (through the technology dip switches controller selection) and EPROM from 20/07//2004 or later.***

Without Biometric Verification: ***This option is visible after pressing Shift and F12 keys.*** This option apply with BioFlex or BioProx readers. It allows the user to turn biometric verification off (i.e. no finger required for access) and send the badge code directly to the controller. Turning fingerprint authentication off will result in a less secure system and is not recommended!

USING THIS OPTION DISABLES THE FINGER VERIFICATION AND IS A SECURITY RISK!

Keyboard Mode: This option is only visible for BioFlex readers. Select the way to send the user Keypad PIN to the BioFlex reader:

- **Buffered keys in string 26 Bits**: The code as a whole is sent in one string.
- **Key by key**: Each time a key is pressed, its code is sent.

Tips & Notes

‘Custom’ Bio Wiegand Format

Each template needs to be downloaded to the biometric readers with an identification number (Called "Bio ID" or "Bio template ID"), which identifies the person. This Bio ID depends on the Bio Wiegand format defined (as the card code depends on the Badge format defined). Normally, the Bio ID is calculated by the system from the last numbers of the card code. For example, the ‘Standard 26 bits’ Bio Wiegand format calculates the Bio ID from the 4 last digits of the card code.

Nevertheless, the length of this number could be not sufficient in some cases. For example, when 2 badges have the same 4 last digits (561234 and 781234), they will have the same Bio ID. To prevent this risk of duplicates, there are ‘Custom’ formats which allow to customize the Bio ID computation.

Examples of Bio Wiegand formats:

- **‘Standard 26 bits’ format**: The Bio ID is the decimal conversion of the last 4 hexadecimal digits of the card code. This format allows also the ‘Inverse parity’ and ‘Duress code’ features.

- **‘Standard 37 bits’ format**: The Bio ID is the decimal conversion of the last 6 hexadecimal digits of the card code. This format allows also the ‘Inverse parity’ and ‘Duress code’ features.

- **‘Custom Pass-Thru’ format**: A customized Bio format which allows the user to define which bits to use in the Wiegand bits string to define the Bio ID. This format get three parameters:
  Total bits: Bits total number of the Wiegand card code read by the reader.
  ID Start bit: First bit position of the Bio ID among the card code.
  ID Length bits: Bits total number which compose the Bio ID.

- **‘Custom 6 digits’ format**: The Bio ID is the decimal conversion of all the 6 hexadecimal digits which compose the 26 bits card code.
  Total bits = **26**
  ID Start bit = **1**
  ID Length bits = **24**

Note: The calculation method used by the application to compute the Bio ID from the card code depends on: (1) the Badge Format and (2) the Bio Wiegand Format.

If the Badge format and the Bio Wiegand format are the same for all the controllers and all the biometric readers, the algorithm which links the card code and the Bio ID is the same for all the system and therefore the cardholders Bio ID are similar on all the biometric readers. The templates and their Bio ID numbers may be broadcasted to all the biometric readers.

Therefore, in a normal situation, it is recommended to have the same format definitions throughout the whole system.

3.3.3. Controller - Input

The informative table summarizes the input parameters connected to the controllers. Default parameters are defined according to the controller type. To obtain more detailed information and modify input data click on the **[…] button** situated to the right of the table of the corresponding tab.

Inputs are used for access control or for alarm monitoring purposes:

- **Access control**:

  - Door control: A door contact device is connected to an input: the two input states open or closed correspond to the two door status: open or close. An alarm is activated in case a door is forced or left open beyond the specified 'door alarm delay' period

  - Exit request: A RTX button ('Request to Exit') is connected to the input: pushing this button will lead to the activation of the corresponding door relay

- **Alarm monitoring**:

  - General alarm input: A sensor/detector (magnetic contacts, movement detectors, etc.) is connected to an input: the two input states open or closed correspond to the two possible status of the detector: normal or under alarm.

  The 'normally' state (either 'normally open' or 'normally closed') of an input is the status, open or closed, into which the input is not under alarm.

  When an armed input goes under its alarm status, it triggers:
  An alarm at the central station
  Predefined relays or local reflexes
  Automatic processes or predefined global reflexes

Table analysis

Num: Number of the selected input

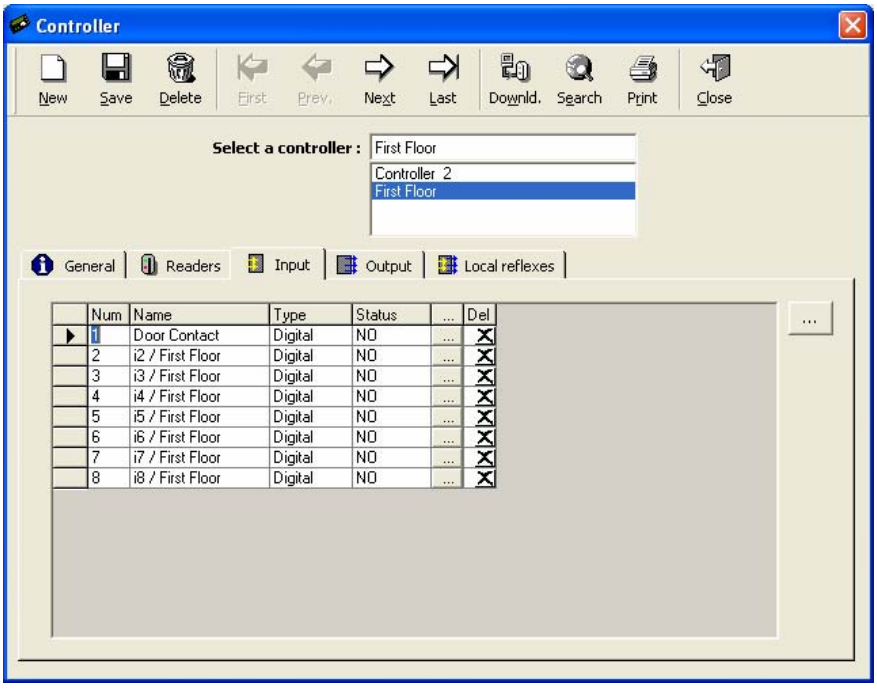
Name: Name of the input

Type: Mention if the input type is Digital, Digital 4 states or Analog.

Status: Input normal status, i.e. normally open (NO), normally closed (NC) or State 1 to 4.

Button […] (on the input line): Click on this button to display the "Input" screen for creating, consulting or modifying data

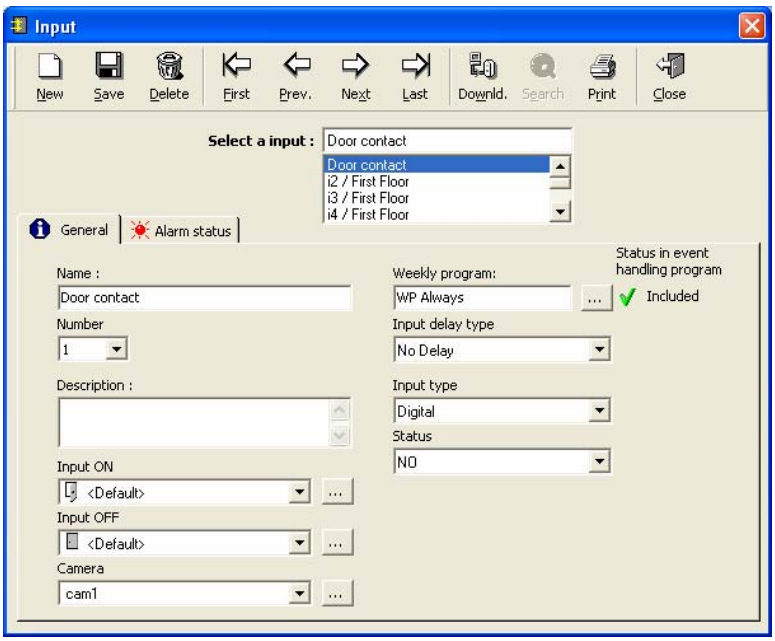
Button [×] (on the input line): Click on this button to remove the input from the list displayed



Button […] (outside the table): Click on this button to display the "Input" screen even if no input is selected

3.3.3.1. Controller - Input - General Screen

The “Input” screen enables the input parameter definition. It can be reached from to the corresponding tab of the “Parameter - Controller” screen, by clicking on the **[…] button** situated to the right of the table.



Fields

Name: Name the input

Number: Choose the input number; the maximum input number connectable depends on the type of controller used (See ‘Types of controllers and associated readers, inputs and outputs’ in the “Controller – General” Chapter)

Description: Describe the new data entry

Input ON: Select the icon that graphically represents the input in its physically ‘ON’ position in the maps or click on the **[…] button** for creating a new one.

Input OFF: Select the icon that graphically represents the input in its physically ‘OFF’ position in the maps or click on the **[…] button** for creating a new one.

Camera: Select the camera video to associate with this input, if needed (for use with the Video Module ONLY).

Weekly program: Assign a program to the input to define alarm arming or disarming periods; to create or modify the program, called also Event handling program, click on the **[…] button** (see also the “Event Handling Program” Chapter)

Input delay type:

- **No delay**: An alarm is raised as soon as the input is activated
- **After… (if on alarm)**: Specify the number of seconds beyond which an alarm is raised if the input is still activated
- **After… (even if no more on alarm)**: Specify the number of seconds beyond which an alarm is raised, even if the input is not activated

Input type:

- **Digital** (2 states): The input may have two states only: open or closed, which correspond to the two possible states of the sensor/detector connected to the input.
- **Digital 4 states**: In addition to the two basic states of the sensor/detector (open or closed), the input may detect two supplementary states which correspond to the status of the line used to connect the sensor/detector to the input: line cut or line short.
- **Analog**: The input can take different decimal values according to the sensor connected to it (temperature, etc.) and triggers alarms or specific action when it reaches pre-defined values (by default, three limit values are defined: 2 / 2.88 / 4).

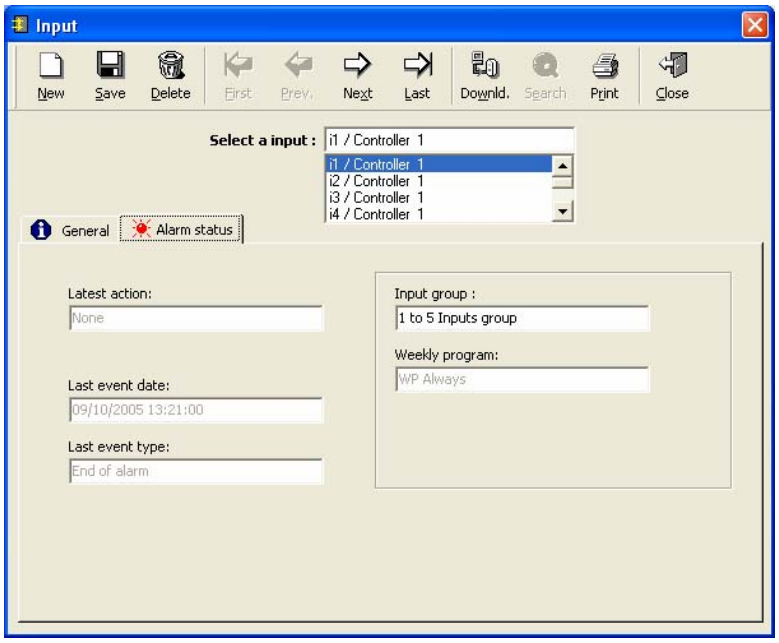
Consult the controller documentation to check which type of inputs is available in the controller.

Status: Choose the status among: NO, normally open or NC, normally closed or State 1 to 4, in which the input is NOT under alarm.

3.3.3.2. Controller - Input - Alarm status

This tab gives information related to the alarmes. The system displays this information automatically, without possibility of modification.

Data displayed



Latest action: Latest PC action sent to this input (PC actions always overwrite the input status as defined by its weekly program).

Note: Such action may be sent manually, through the "Event-Handling – Active alarms" screen or automatically through a pre-defined input group deactivation global reflex.

Last event date: Exact time of the last physical event on this input. This refers to a real event, (i.e., not a PC action).

Last event type: Type (start/end of alarm, line cut/short) of the last physical event on this input. This refers to a real event, (i.e., not a PC action).

Input group: Input group to which the selected input belongs. This field is visible after selecting 'Alarm definition for group of input' option in the "Tools - Options - General" screen.

Note: Allocating an input to an input group is done at the "Event Handling - Input group" screen.

Weekly program: The weekly program of the input group (the weekly program of the individual input can be seen at the General tab of the input screen. In a case of a conflict between the two, the individual weekly program has the higher priority). This field is visible after selecting 'Alarm definition for group of input' option in the "Tools - Options - General" screen.

3.3.4. Controller - Output

The informative table summarizes the parameters of the controllers outputs. An output is materialized by a relay located on the controller board (or on its extension board) to which an external device may be connected and therefore activated by the controller. (Door opener, siren, etc.) Default relays numbers are defined according to controller definition. To obtain more detailed information and modify input data, click on the **[…] button** situated to the right of the table of the corresponding tab.

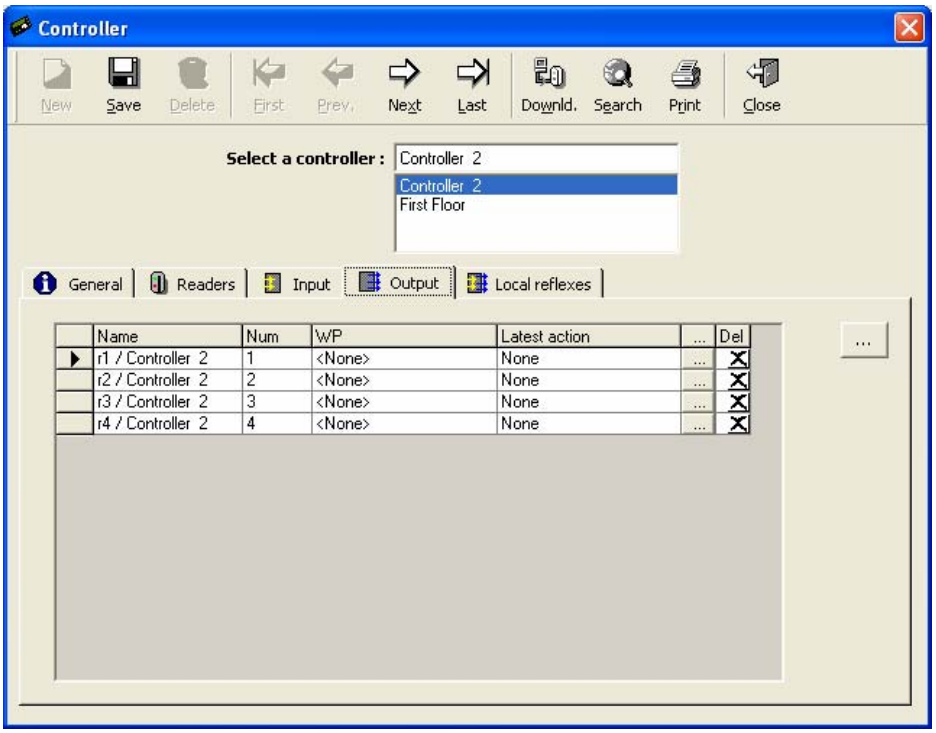


Table analysis

Name: Name of the output

Num: Number of the output selected

WP: Name of the weekly program associated to the output, defining the activation and non-activation periods

Lastest action: Mention of the last action that could have affected the output; for instance, the action that closed a “normally open” output by a global reflex

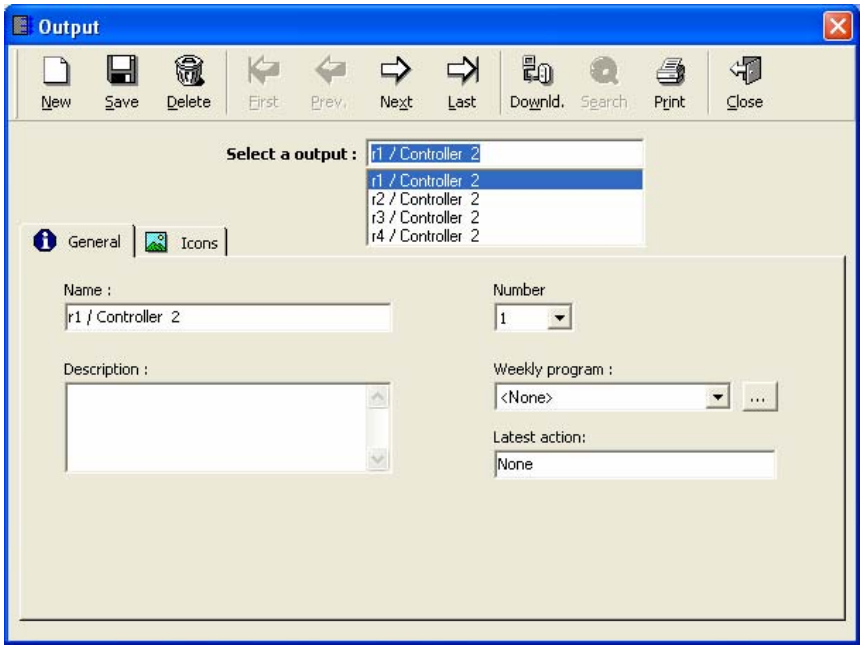
Button […] (on the relay line): Click on this button to display the “Output” screen for creating, consulting or modifying data

Button [×] (on the relay line): Click on this button to delete the output from the list displayed

Button […] (outside the table): Click on this button to display the “Output” screen even if no item is selected

3.3.4.1. Controller - Output - General Screen

The “Output” screen allows output parameter definition. It is accessible by going to the corresponding tab of the “Parameter - Controller” screen and clicking on the **[…] button** located to the right of the table.



Fields

Name: Name the output

Description: Describe the new data entry

Number: Choose the output number; the maximum number depends on the type of controller used (See ‘Types of controllers and associated readers, inputs and outputs’ in the “Controller – General” Chapter)

Weekly program: When a Weekly program is selected, the relays will be automatically activated during the ‘green periods’ defined by this program (and deactivated during the ‘red periods’ of the program). Click on the **[…] button** to create or modify the weekly program.

Note: Do not allocate weekly program to door relays. Time activation of door relays has to be set from the ‘Controller – Reader – Door control’ screen. Allocating weekly program through this ‘Output’ screen may result in a definition conflict.

Latest action: Mention the last action that could have affected the output; for instance, the action that closed a “normally open” output by a global reflex.

3.3.5. Controller - Local Reflexes

A local reflex defines the outputs activation following the trigger of an input of this same controller. The reflex occurs even if communication with the controller is interrupted. The "Local reflex" screen defines the link between the inputs and the outputs.

The informative table summarizes the parameters of the local reflexes associated to the controller. To obtain more detailed information and modify the data, click on the **[…] button** situated to the right of the table of the corresponding tab.

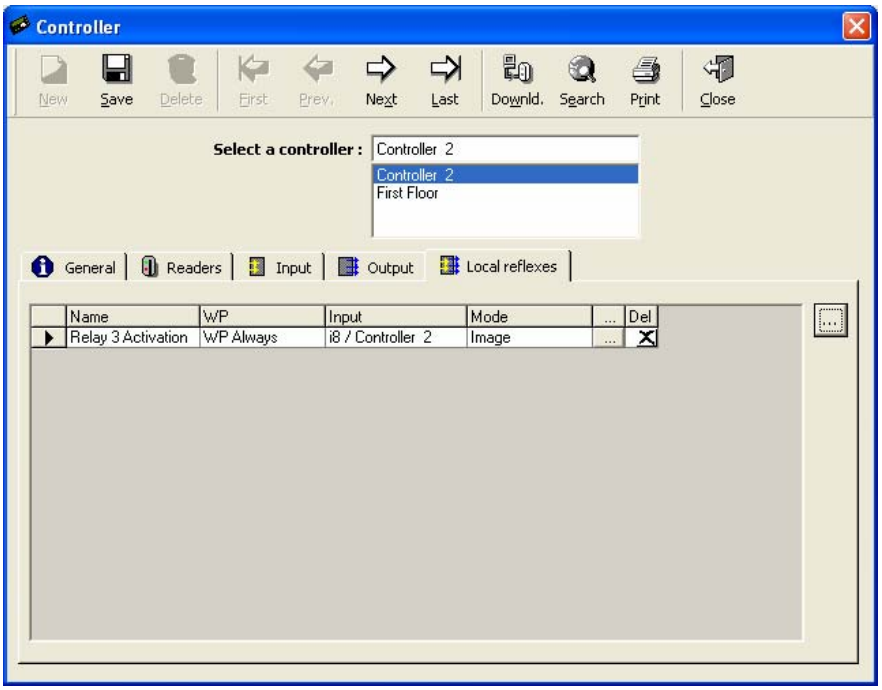


Table analysis

Name: Name of the reflex

WP: The local reflex weekly program defines the reflex activation and non-activation periods

Input: Name of the input that sets off the local reflex

Mode: Type of action set off by the local reflex (Image, Constant ON, During)

Button […] (on the line of the reflex): Click on this button to display the "Local reflex" screen, in order to consult or modify data

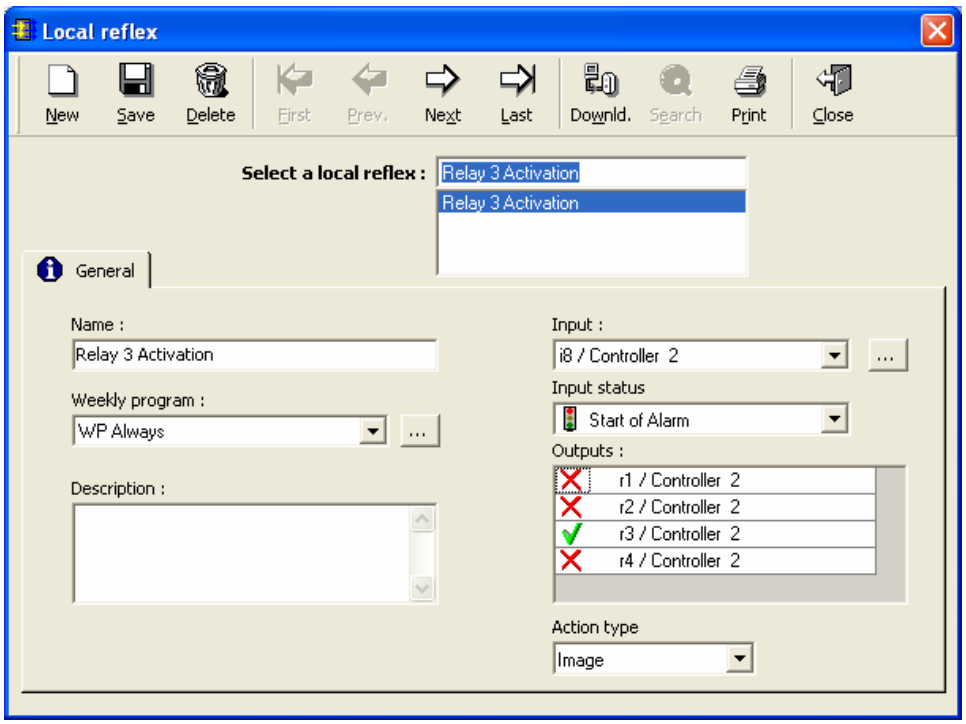
Button [×] (on the line of the reflex): Click on this button to delete the reflex from the list displayed

Button […] (outside the table): Click on this button to display the "Local reflex" screen, even if no item is selected

3.3.5.1. Controller - Local reflex - General Screen

A local reflex defines the outputs activation following the trigger of an input of this same controller.

The “Local reflex” screen allows the definition of the reflex parameters. It is accessible by going to the corresponding tab of the “Parameter - Controller” screen and clicking on the **[…] button** located to the right of the table.



Fields

Name: Name the reflex

Weekly program: Choose from the list the weekly program which defines the reflex activation and non-activation periods or click on the **[…] button** to create or modify the weekly program

Description: Describe the new data entry

Input: From the list, choose the input setting off the local reflex or click on the **[…] button** to create a new input

Input status: Select the status of the input which sets off the local reflex: Start of alarm, End of alarm, Line short, Line cut, Open, Close, <Any Status>.

Outputs: Click on the **V** or **X** buttons, to declare which relays to activate or to deactivate

Action type: Choose the type of action set off by the local reflex:

- **Image**: When the input is activated, the reflex is activated and when the input is deactivated, the reflex is deactivated at the same time
- **Constant ON**: When the input is activated, the reflex is activated and stays activated, even if the input is deactivated
- **During**: When the input is activated, the reflex is activated during a predefined delay (to define from 1 – 120 sec.).
  Note: Alternated mode (During = 122 Sec): The reflex is activated after the input is activated and stays activated; the reflex is only deactivated after a second input activation and stays deactivated, and so on.

3.4. Time Zone

3.4.1. Basic Concepts

Time zones consist of calendar divisions into daily, weekly and holiday time segments associated to predetermined system functions.

The system recognizes:

- **Daily program**: division of a 24-hour day into access zones ('green' time periods) and non-access zones ('red' time periods)
- **Weekly program**: made up of a daily program for each day of the week and a supplementary daily program for holidays
- **Holiday**: dates specified as holidays

During the 'green' periods of a Daily Program, the system behaves as follows:

- **Cardholders** may access different areas of a site according to their access group
- **Readers** operate in predefined the access mode recorded as 'Security Level 1'
- **Alarms** are armed
- **Relays** are automatically activated

Time zone application table

	Within the limits of the Time Zones ('Green' periods)	Beyond the limits of the Time Zones ('Red' periods)
Access control	Access granted according to access group	Access denied
Readers	Access mode Security Level 1	Access mode Security Level 2
Alarm zones	Armed	Not armed
Relays	Activated	Non activated

Tips & Notes

Arming alarms

Refer to the "Event Handling Program - Alarm" paragraph for more information regarding how to arm an alarm.

Importance of a proper definition

Properly defining time zones is essential for the system to work optimally. It is highly recommended to successively specify the daily, weekly and holiday programs prior to defining the other parameters of the system.

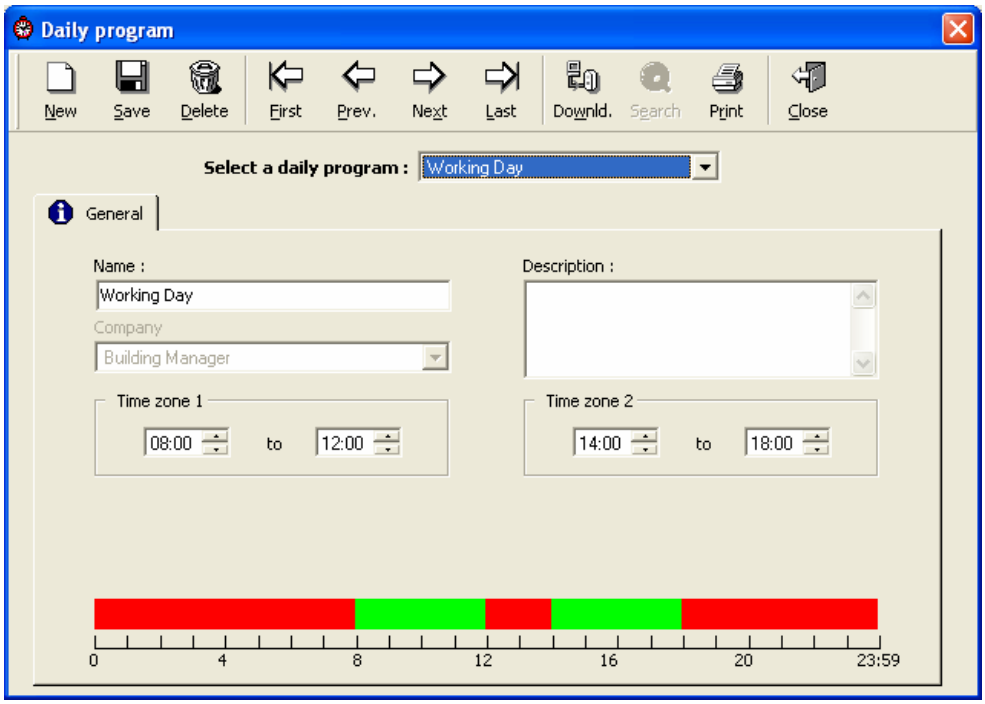
Maximum number of usable programs

Many daily, weekly and holiday programs can be created in the whole the system but each controller may include a restricted number of usable programs (99 Daily Programs, 32 Access Weekly Programs, 80 Event Weekly Programs and 60 holidays). An error message appears if the limit of usable programs has been exceeded for a specific controller.

3.4.2. Daily Program

The division of days (24H) into time zones, to which are associated the system predetermined functions, is defined in this screen. A Daily Program divides a 24H day in 2 time zones which therefore defines 5 time periods, 3 ‘Red’ and 2 ‘Green’.

Note that it is possible to divide each day into 4 times zones and therefore create 5 ‘red’ and 4 ‘green’ periods. (by changing the option ‘2 times zones’ to ‘4 time zones’ in the field ‘Daily Program Time zones’ on the ‘Tools – Options – Communication’ screen)



Fields

Name: Name the new daily program; examples: part-time AM, night team

Company: Company the item refers to (for use with multi-company application ONLY).

Description: Describe the new data entry

Time zones 1 - 2 (or 1 - 4): Define the limits of the 2 (or 4) time zones using the format XX:YY, where X = hour and Y = minute

The ruler at the bottom of the screen gives the time frames in a visual manner.

- The **green** frames represent the ‘Green periods’ (4 maximum)
- The **red** frames represent the ‘Red periods’ (5 maximum)

Tips & Notes

Programs by default

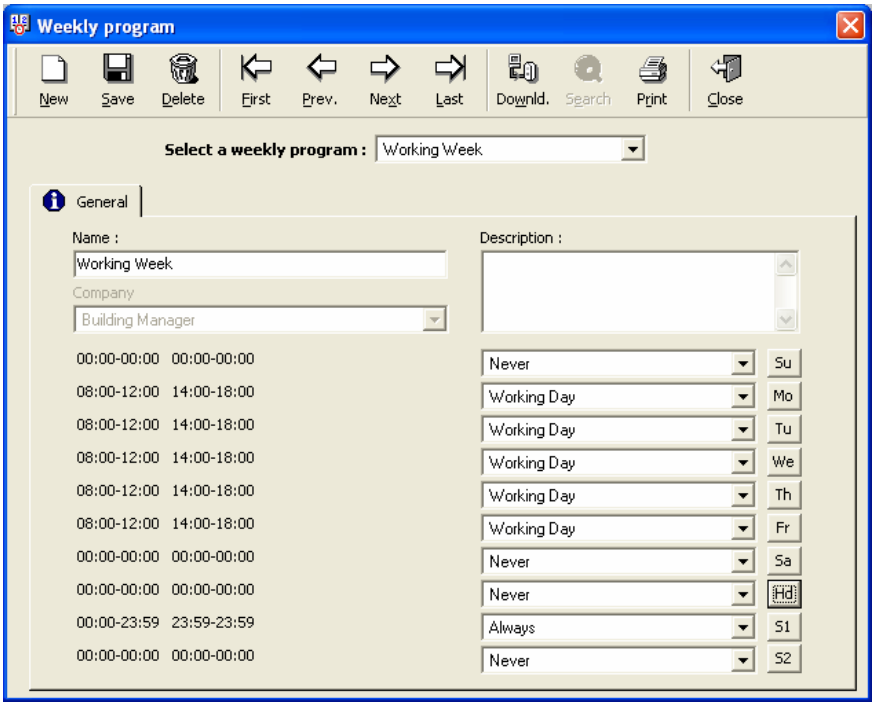
The two daily programs “Always” and “Never” are defined by default. Their denomination can be modified but the two programs can neither be erased or their contents modified.

New daily program

By default, the time frames for a new daily program are from 8 AM to12 AM and from 2 PM to 6 PM.

3.4.3. Weekly Program

A weekly program is made up of 8 daily programs, one for each day of the week and an extra program for holidays. Two more daily programs can be added (in the "Tools - Options - General" screen) for having other access control in some days in the year (i.e. the day before a National day, annually closure or exceptional opening, etc.). This last feature requires the use of controllers equipped with an EPROM from 01/06/2004 or later.



Fields

Name: Name the new weekly program

Company: Company the item refers to (for use with multi-company application ONLY).

Description: Describe the new data entry

Daily programs: One for each day of the week (Su - Sa), one for holidays (Hd) and if needed, one for each special day (S1 – S2); select the adequate program from the list or create a new daily program by clicking on the corresponding button associated to the day

Time frames corresponding to the program selected are displayed on a grey background.

Tips & Notes

Programs by default

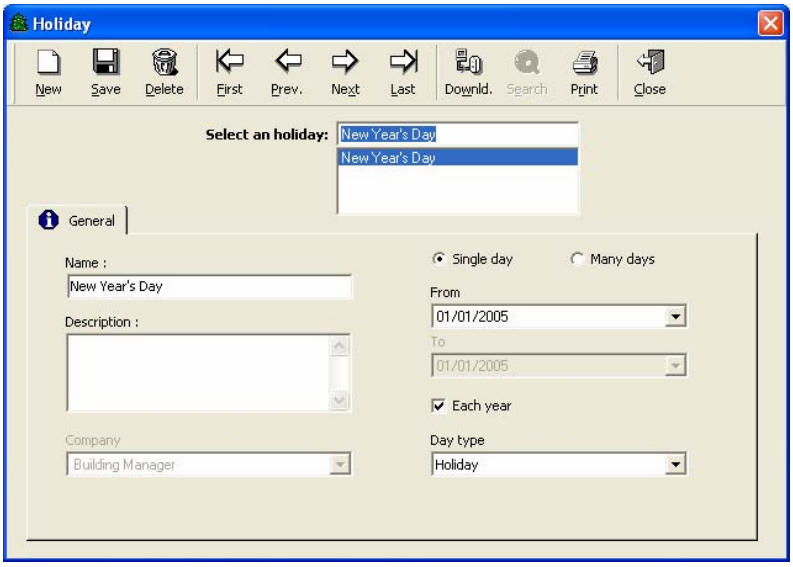
The two weekly programs "WP Always" and "WP Never" are defined by default. Their denomination can be modified but both programs can neither be deleted nor modified.

Deactivating Holiday and Special Days

Holiday and special days daily programs can be defined as <usual daily program of the day> in order to deactivate the rule of these specific days, for some employees if needed.

3.4.4. Holiday

Days considered holidays by the system are defined in this screen. During these holidays, Daily Program in use (and therefore system behaviour) is the 8th program defined in the Weekly Program (or the 9th or the 10th program in case of using special days; see the previous paragraph).



Fields

Name: Name the new holiday

Description: Describe the new data entry

Company: Company the item refers to (for use with multi-company application ONLY).

Single Day & Many Days: Select if the new data concerns one single day or a several days period.

From: The current date is listed by default. In the calendar, it will appear circled in red. To call up the calendar, click on the arrow situated to the right of the current date. Select the day, month and year in the calendar that appears on the screen or enter directly the date.

On the calendar, by clicking on “Today” the actual date is selected.

To select a given month

- Produce the list of months by pressing on the name of the month displayed
- Skip from one month to the next by pressing on one of the double arrow keys ends (next to the month)
- Scroll the calendar from month to month by pressing and maintaining depressed on one of the double arrow keys ends (next to the month)

To select the desired year

- By clicking on the displayed year appear double arrow keys (next to the year). Skip from one year to the next by pressing on one of the double arrow keys
- Scroll the calendar from year to year by pressing and maintaining depressed on one of the double arrow keys ends (next to the year)

To: If the holidays last several days, select the ‘Many days’ option and enter here the last day.

Each year: Select to repeat the definition of a holiday for coming years; for example, Christmas always falls on the 25th of December.

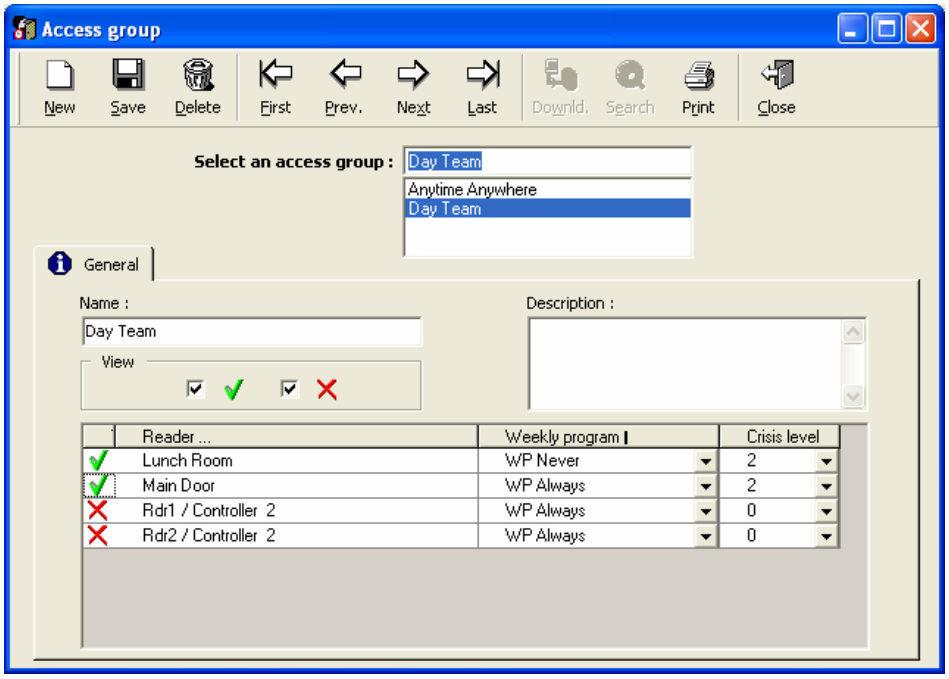
Day type: Select the holiday type (Holiday, Special Day 1 or Special Day 2).

3.5. Access Group

This function determines “who can go where and when”. The access group attributed to employees determines the doors accessible, the weekly programs associated to the doors and the door crisis level.

To use this function:

- Select the authorized doors for the individuals of a group
- Associate the corresponding weekly programs
- Attribute a crisis level to each access group, door by door
- Attribute an access group to each employee, in the “Parameter - All Cardholders - General” screen



Fields

Name: Enter a name for the access group

Description: Describe the new data entry

View:

- Check **V** button to display readers list for which access is granted for the selected group
- Check **X** button to display readers list for which access is refused for the selected group

First column of the table: **V** or **X**

- Select **V** to include the reader in the access group
- Select **X** to exclude the reader from the access group

Reader: List of readers and doors associated

Weekly program: Select the weekly programs associated to the reader from the list

Crisis level: Select the crisis level (Refer to the “Manual Action - Crisis Level” chapter for more information).

Tips & Notes

Access group by default

An access group “Anytime Anywhere” is defined by default. It guarantees permanent free access to all doors. Its denomination can be modified but this group can neither be deleted nor modified.

Minimal authorization by default

When a new data is created, status for all doors is checked. By default, minimal authorization is granted.

Many access groups

The system does not limit the number of access groups. However if a large number of access groups are required due to the variability of the badge holders’ work hours, it is recommended:

- To create an access group that guarantees permanent free access at authorized doors, with the weekly program: <Use Personal WP> and the crisis level: <Use personal crisis level>
- To restrict access by using personal weekly programs and individual crisis levels, in the personalized data of the badge holder.

Different error message

Please note the difference in the error message associated to an access refusal in the following two cases:

	Reader …	Weekly Program …	Error message if access denied:
V	Rdr1 / Controller 1	WP Never	“Not authorized at this time”
X	Rdr1 / Controller 1	WP Always	“Reader not allowed”

3.6. Department

A department is a functional notion, which allows site division into various work areas. This function is mostly informative. A department can be chosen as a selection criterion to display and print reports.

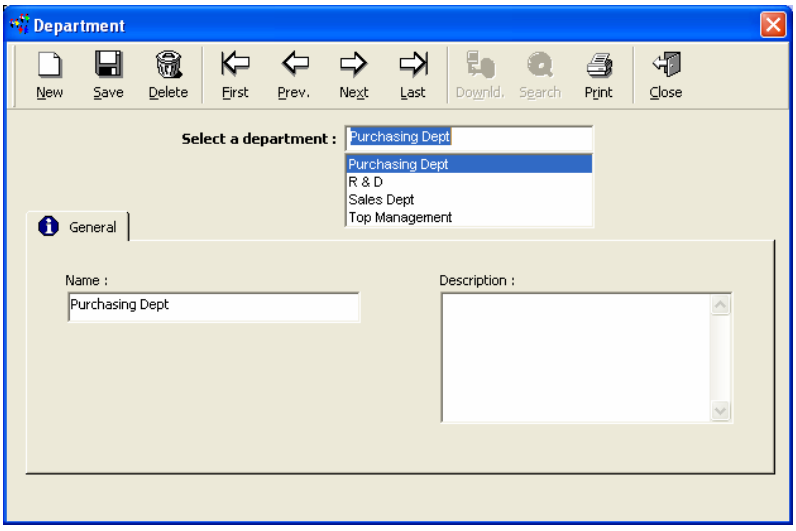
Examples

Administration, Top Management

Fields

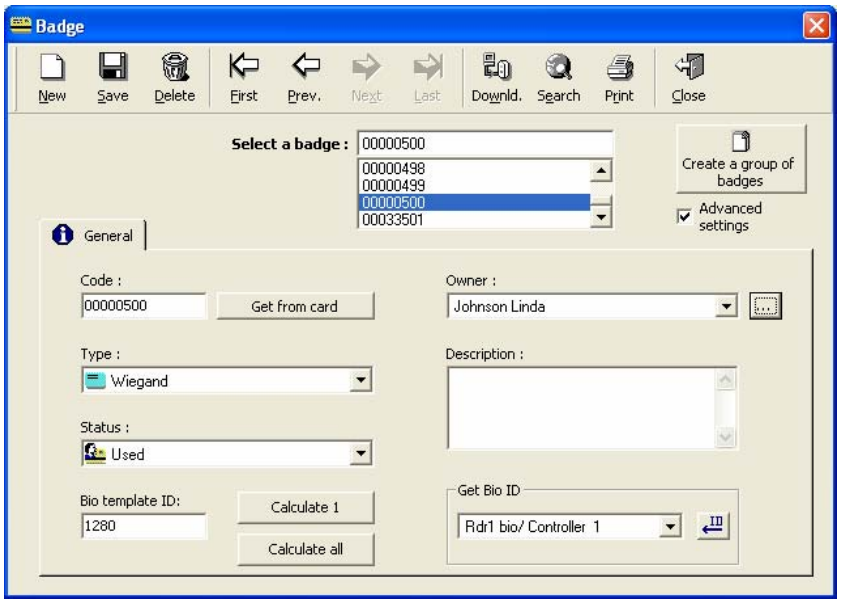
Name: Name the new department

Description: Describe the new data entry



3.7. Badge

This screen defines the badges used and displays their owners.



Fields

Create a group of badges: Click for creating a series of badges (in another new window, see Group of Badges paragraph).

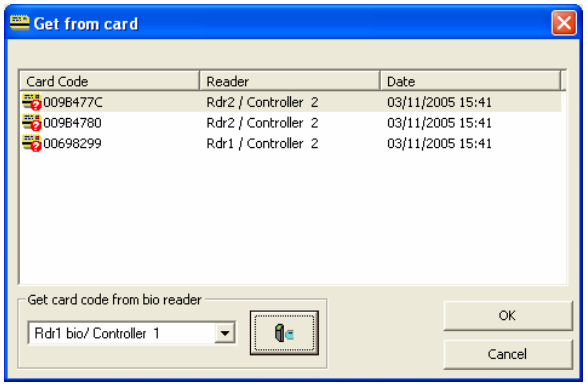
Advanced settings: Displays advanced features related to biometric readers.

Code: Enter directly the card code. Generally, this code is written on the badge as a sequence of 8 characters using numbers from “0” to “9” and letters from “A” to “F”. If the length of the code is shorter than 8 characters the system will complement it by adding zeros at the beginning of the code. A default badge code can be automatically inserted at the beginning of all badge codes with the “Tools -Options - General” screen.

Note: This code is downloaded to the controllers and saved in the application database. The code may be read differently according to the reading technology defined in the “Reader - General” tab and the Badge format defined through the ‘Reader - Miscellaneous/Badge format’ tab.

Get from card: Click for opening the following screen in order to get the code by reading the card:

- To get the card code from a regular reader, pass the card on one of these readers: when the card code appears on the window, select it and press OK.
- To get the card code from a biometric reader, select the relevant reader in the lower ‘get card code from bio reader’ window, press the button right to this list and pass the card to the selected reader: when the card code appears on the window, select it and press OK.



Type: Select the badge technology from the displayed list (Magnetic, Wiegand, etc.).

Note: Reading technology is defined in the ‘Technology’ field in the “Parameter - Controller - Reader - General” screen. Only badges data compatible with the selected technology will be downloaded to the readers.

Status: Specify the badge status: **Used**, **Cancelled**, **Free** (default), **Lost**, **Stolen**. A badge cancelled, lost or stolen is automatically invalidated by the system.

Bio template ID: Each template needs to be downloaded to the biometric readers with an identification number (Bio ID or Bio template ID), which identifies the person. This number, displayed and editable in this field, is automatically computed by the system from the card code (see the "'Custom' Bio Wiegand Format" paragraph), based on the Badge format (defined through the "Reader - Miscellaneous/Badge format" tab) and the Bio Wiegand format (defined in the "Reader - Finger Print" tab).

Note: Make sure that the system has calculated the Bio ID and that is not 0. Cards that were defined prior to the creation of the first biometric reader, will have Bio ID = 0. For these cards, calculation of the corresponding Bio Template ID will be done automatically only when the card owners will enroll the finger. After a biometric reader definition, each new badge will receive automatically a Bio ID code, which is displayed in the 'Bio template ID' field after saving. A manual calculating is also possible by selecting the "**Advance settings**" box and pressing '**Calculate 1**' (to re-calculate the selected badge) or '**Calculate all**' (for all badges in the database, including those that are not 0). If the field remains empty or null it means that the system cannot calculate the Bio ID and it has to be entered manually or be read directly from the biometric reader. To obtain the code from the card itself, use the 'Get Bio ID' window field. There you need to select the reader from the list, click on the 'ID' button, and pass the badge at the biometric reader.

Owner: Select to assign a badge to an employee; when an attributed code is selected, the name and surname of the badge holder appear in this field. The field remains empty if the code entered is not attributed. Click on the **[…] button** to display the employee's screen.

Description: Describe the new data entry

Get Bio ID: ***Visible by checking the 'Advanced settings' box.*** To enroll directly the Bio ID from a biometric reader (BioProx or BioFlex), select the relevant enrollment reader from the list, click on the **'ID' button** and then pass the badge at the selected biometric reader. The Bio ID should appear on the 'Bio template ID' field.

Tips & Notes

Recording Bio ID with BioPass and BioFlex + Keypad

When only BioPass or BioFlex with keypad readers are used in the system, cards are not requested. However, a badge (even if it does not physically exist) must be attributed to each person. Therefore, the 'Technology/Badge format' of these readers must be 'Wiegand/Decimal' (even if no cards are used) and the Bio Wiegand format must be 'Standard 26 bits'. Card codes may be manually entered through the 'Code' field or using the 'Create a group of badges' function. The system then may calculate the Bio ID which is, in this case, equal to the card code. The PIN code to use at the keypad connected to the BioFlex will be this Bio ID, which is a **maximum 5 digits code (max. 65535)**.

Card code or badge format change

After changing a card code, a re-calculation of the Bio ID is needed for that card only ('Calculate 1' button). However, in a case of modification of the 'Badge format' or the 'Bio Wiegand Format', a re-calculation of the Bio ID for all card ('Calculate ALL' button) is needed plus initialization of all the Biometric readers (from the "Diagnose" screen).

3.7.1. Badge Search

Displaying the list of all the attributed badges

Double click on the “Search” icon of the icon bar.

Performing a search on a specific type, status or owner

To find a badge from its type, status or owner:

- Click on the “Search” icon of the icon bar (or type “F10” key)
- Select the desired type, status or owner
- Click on the “Search” icon a second time

  If the badge is attributed, details of the badge will be displayed on the screen

  If no badge has been found, the fields remain empty and the screen has a grey shade
- Click on the “Search” icon to display the list of all the attributed badges

Searching a badge from all or part of its code

When pressing on the “Search” icon, if the first characters of the code have been entered, the system will display all the badges that start with the desired sequence, after pressing on the “Search” icon a second time.

Examples:

In the “Code” field type	The system displays all the card codes attributed
32	Beginning with “32”
32%45	Beginning with “32”, which contain the characters “45”
_ _ _ _32_ _	Which contain the characters "32" at the 5th and 6th position

Note:

% will replace several characters

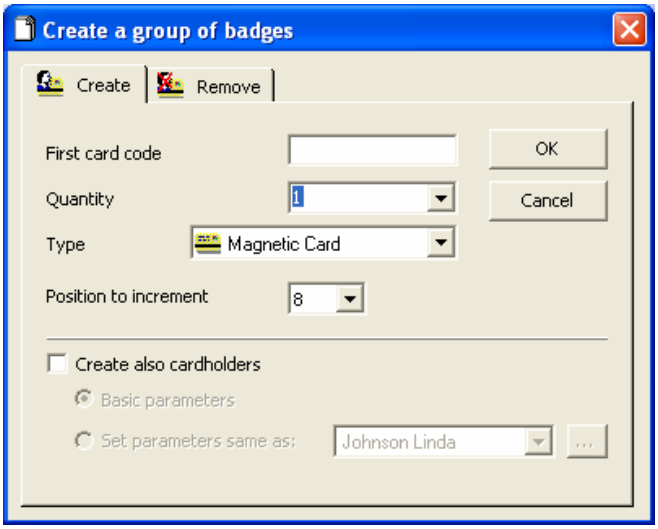
_ (underscore) will replace one single character

3.7.2. Group of Badges

This screen allows the creation and deletion of a group of badges in a single command. It is accessible via the "Parameter - Badge" or "Tools - Create a group of badges" menu.

3.7.2.1. Group of Badges - Create

Create a group of badges in a single command using this tab.



Fields

First card code: Type the 8-character code assigned to the first badge

Note: A beginning card code common to all badges can be set in the "Tools - Options - General" screen.

Quantity: Type or select the number of badges to create; the list has been provided for information. The maximum number of badges depends on the plug limitation.

Type: Choose the badge technology from the displayed list (Magnetic, Wiegand, etc.).

Note: The choice of reading technology will enable selective data download to the readers. Only data compatible with the selected technology will be downloaded to the readers.

Position to increment (between 0 and 8): Define the position of the character to increment in the 8-character sequence making up the code. This allows keeping a constant group of characters as code endings. ***To use this function, it is necessary that only decimal numbers compose the beginning of the code, till the position to increment.***

Example

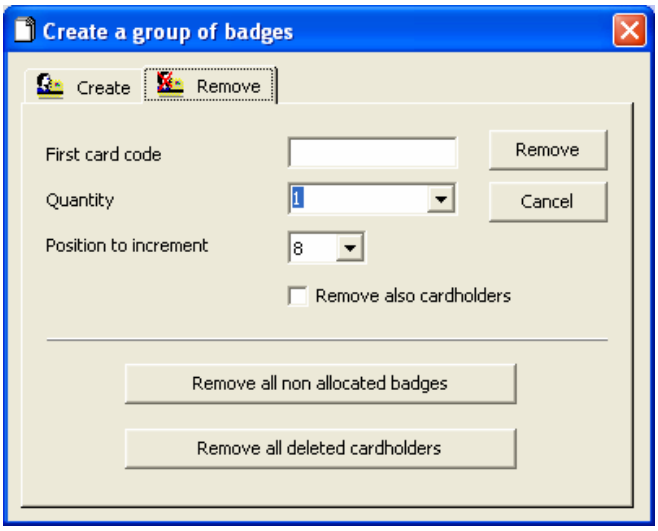
First card code	Position to increment	The next code:
12345ABC	5	12346ABC

Create also cardholders: Create simultaneously a group of badges and their associated badge holders, which will have:

- **Basic parameters**: Valid employee parameters to whom the "Anytime Anywhere" access group is attributed
- **Set parameters same as**: Specify the name of the badge holder whose parameters will serve as reference for the new badges

3.7.2.2. Group of Badges - Remove

Remove a group of badges in a single command using this tab.



Fields

First card code: Type the 8-character code assigned to the first badge

Quantity: Type or select the number of badges to delete; the list has been provided for information. The maximum number of badges depends on the controller and plug limitation.

Position to increment (between 0 and 8): Define the position of the character to increment in the 8-character sequence making up the code. This allows keeping a constant group of characters as code endings. ***To use this function, it is necessary that only decimal numbers compose the beginning of the code, till the position to increment*.**

Example

First card code	Position to increment	The next code:
12345ABC	5	12346ABC

Remove also cardholders: Delete simultaneously a group of badges and their corresponding badge holders

Remove all non allocated badges: Delete all cards that are not allocated anymore, i.e. temporary cards

Remove all deleted cardholders: Select to remove all deleted cardholders from the database

3.8. All cardholders

3.8.1. All cardholders - Basic Concepts

Each badge holder, employee, visitor or guard, that requires access authorization to the site must be recorded beforehand in the database. To access or modify information related only to visitor or guard, consult the screens "Parameters - Visitor" or "Guard Module".

The "Parameter - All cardholders" screen defines the details of all the users, employee and visitor alike. The menu is divided into six tabs:

- General information
- Personal information
- Location data
- Customized fields
- Exceptions
- Schedule AG

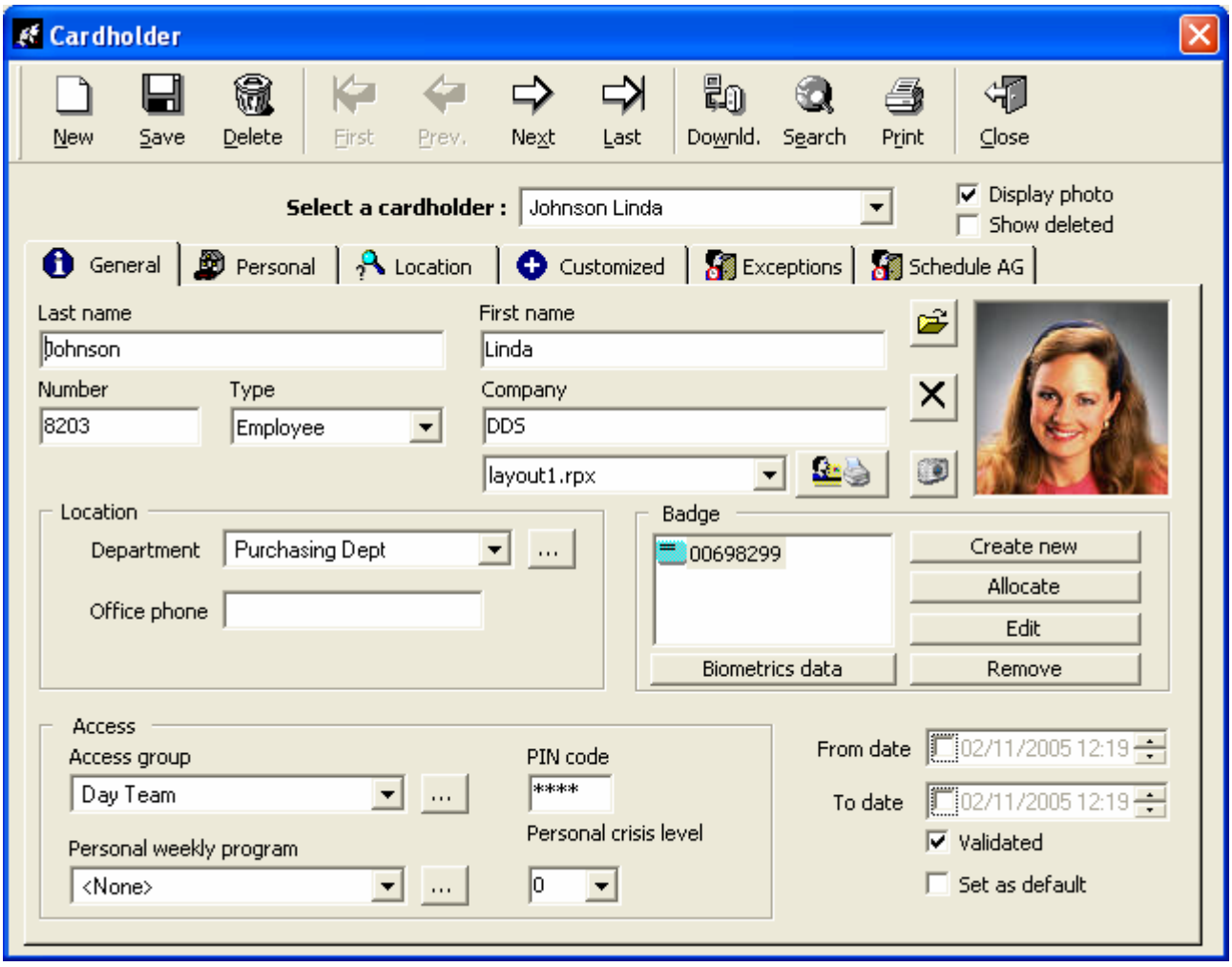
Tips & Notes

Quick definition

The family name is the only obligatory field for creating a new badge. Nevertheless, in order to grant access, the field "Badge" is necessary. The "Anytime Anywhere" access group is associated by default to the new cardholder.

3.8.2. All cardholders - General

This screen records general information about the badge holder.



Fields

Display photo: Check this box to display the employee's picture

Show deleted: Check this box to display the deleted badge holders; by default, this box is unchecked

Click on the **Delete button** (in the tool bar) to delete the badge holder from the database. Deleted badge holders are not erased from the database but saved under the type "Deleted". They are not displayed by default.

Actions following the badge holder deletion:

- The badge holder is classified as "Deleted"
- The corresponding badge allocation is removed
- The badge is added to the non-allocated badges list
- The validation case is unchecked
- The record disappears from the badge holder screen, unless the "Show deleted" box is checked

Note: Only allocated cards are taken into account into the computation of the plug limitation.

Last name & First name: Type the last name and the first name of the cardholder. It is possible to create cardholders with the same last and first name. In this case, it is necessary to enter a unique number per person in the "Number" field and to check the "Allow duplicate name of cardholders" option in the "Tools – Options - General".

Number: Enter an identification number

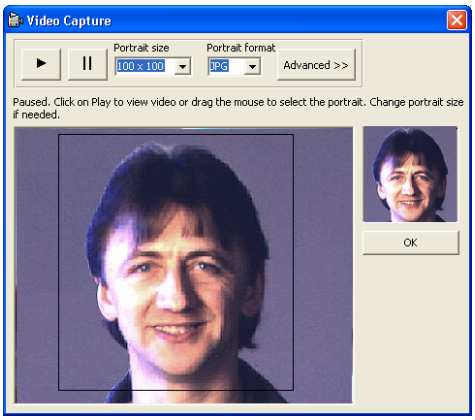
Type: Choose the cardholder type (Employee, Visitor or Guard); the "Type" field does not appear in the "Parameters - Visitor" or "Guard Module" screens

Company: Mention the name of the company the badge holder works for

Employee's picture: Click on the following button

- **Select a picture**: To select the name of the file beholding the employee's picture (jpeg or bmp format)
- **Remove picture**: To remove the employee's picture
- **Take a snapshot**: To open the following "Video Capture" screen:

  Users which have a camera video or a web cam can play and pause the live video stream, select the required image size, and then move the mouse over the paused image to select the part of the image they wish to keep as the cardholder image.


Video Capture
Portrait size
100 x 100
Portrait format
JPG
Advanced >>
Paused. Click on Play to view video or drag the mouse to select the portrait. Change portrait size if needed.
OK

- **Print a badge or define badge printing layouts**: To open the screen of badge printing layouts (Refer to the "All cardholders - Badge Printing Module" paragraph for more information).

Location:

Department: Select the department the employee works for from the list provided or create a new department by clicking on the **[…] button**

Office phone: Mention the office phone number, the cell phone number, etc.

Badge:

- **Create new**: Create a new badge and associate it to an employee (in "Badge" screen)
- **Allocate**: Allocate an existing badge
- **Edit**: Display details of the badge in use (i.e. for modification)
- **Remove**: Remove the badge allocation

Note: A cardholder cannot have several badges of the same technology.

- **Biometrics data**: Create, modify or delete the employee's fingerprint templates (Refer to the "All cardholders - Biometrics data" paragraph for more information).

Access:

Access group: Select an access group from the list or click on the **[…] button**

Personal weekly program: Select the personal weekly program from the list or create a new program by clicking on the **[…] button**; this program is only used if the access group of the selected cardholder has been predefined with the <Use Personal WP> weekly program

PIN code: Mention the badge holder personal identification code to enter on the reader keypad; this code is common to all the reading technologies used

Personal crisis level: Select the individual crisis level, between 0 and 7; this crisis level is only used if the access group of the selected cardholder has been predefined with the <Use personal crisis level> crisis level

From date: Specify the beginning date of the validation period of the badge holder. Type data in directly or select a date by using the direction arrows.

To date: Specify the date and hour when the badge validity will end. Type data in directly or select a date by using the direction arrows.

Validated: Check this box to validate badge use; a non-validated badge exists in the database but its use will be forbidden

To define a validation period

- Uncheck (clear) the "Validation" box
- Check the "From Date" box and / or check the "To Date" box
- Set the validation period in date in the "From Date" and / or "To Date" fields
- Save

Note: If the validation date chosen belongs to the past, the "Validation" box will be checked automatically. Beyond the specified validity date, the badge will automatically become invalid. Every 30 minutes, at xx:15 and xx:45, the program checks if new cardholders need validating or invalidating, in which case the corresponding cardholders definitions are sent to the controllers. The frequency of this checking may be modified through the 'Tools - Options - Communication' screen (default: 30 minutes).

Set as default: By checking this box, the badge holder selected serves as a reference. His parameters are automatically copied as default parameters for newly created badge holders. This function saves the trouble of having to define the same parameters for each cardholder that will be created in the future.

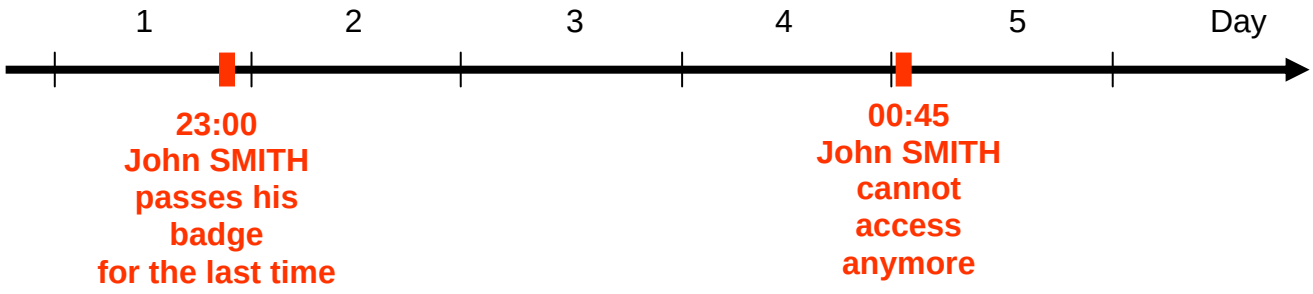
Tips & Notes

Automatic card inhibition if a card not used after X days

It is possible to inhibit automatically cardholders who have not used their card during X days. The checking is done each night at 00:45.

Example:

Let us take a system configured to inhibit all the cardholders that did not pass their badge during 3 days.



A cardholder that passed his badge the day ‘1' (at any hour!) will have access on days ‘2', ‘3' and ‘4'. If he did not pass his badge at a reader of the system during these 3 days, the system will invalidate automatically his badge on day ‘5' at 00:45 a.m.

Operating Mode :

- Exit the application and look for the ini file at the main application folder.
- Open it with Notepad and look for the following entry:

```
AutomaticInhibition = 0
```

If this line does not exist, run the application, go to “Tools - Options” and click “OK”. This operation rebuilds the ini file and inserts all the possible entries according to the latest application version.

- Set the value according to the required days number before inhibition.

  Example, to inhibit all the cardholders that did not pass their badge during 3 days, set:

```
AutomaticInhibition = 3
```

- Save and close this file, and restart PRONET PLUS.

Note :

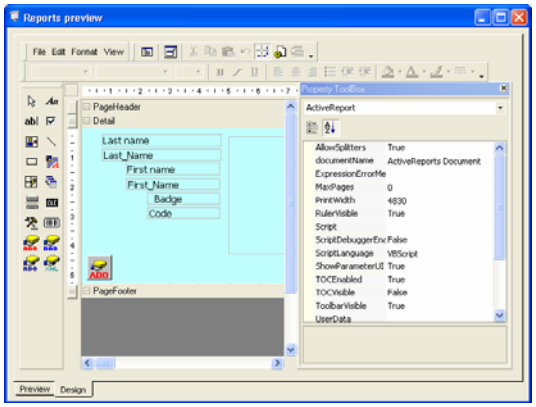
If the PC is turned off all the nights, the inhibition command will not be able to be sent to the readers at 00:45 a.m. This function works only if ***the application is runing at that time.***

3.8.3. All cardholders - Badge Printing Module

This module allows creating and printing cardholder badges to a designated card printer directly from the "All cardholders - General" screen of PRONET PLUS. This module is opened through the "Print a badge or define badge printing layouts" button of the "All cardholders - General" screen, at the lower left side of the photo.

Clicking this button opens a two-tab screen:

- Preview tab: Show a preview of the edited layout. The first editing shows a default layout.
- Design tab: Allows editing the layout.



Operating Mode

The design tab is based on a professional tool of Active Report ®. In this manual we will not cover the large variety of options but we only give some basic instruction and tips:

- **Moving selected fields**: Select an existing field from the 'Detail' window and drag and drop to the required position of the layout.
- **Add a new field**: Select the field type from the toolbar on the left and drop it in the layout.
- **Add a field from the cardholder database:** Click the View - Explorer menu. Two windows will appear on the left. On the lower one, click the "refresh" icon. All the fields of the cardholder screen will appear. Drag any field and drop it in the layout area.
- **Change the background**: Select the current background. On the 'Property ToolBox', go to the "Picture" field, click on the **[…] button** and browse your PC for any graphic file.
- **Change the text in a label/text box:** Select the field and edit the text on the 'Property ToolBox' window, in 'Caption' (for a label) or 'Text' (for a text box). Don't change 'Name'.
- **Save changes to the current layout:** Click on the "Preview" tab.

All editing changes are saved into the default layout when the "Preview" tab is displayed. The default layout is called "_bp.rpx" and is located on the application folder.

Different customized badge layouts can be saved on the \Reports\BP folder under the application folder with RPX format. Saved layouts will appear in a combo box in the "All cardholders - General" screen, left to the badge printing button (the former layout is automatically saved as « layout1 »). This leads to create and print different format badges into a same database. It is possible to save many layouts as required and for printing a specific badge layout to a cardholder, it just needs to select it on the layout list.

! Warnings:

- Do not delete the default photo (cardholder image) field from any layout.
- Do not delete the icon ADO from any layout.
- Do not move, close or resize the 'Property ToolBox' window.
- If by mistake you have done any of the above action, you may need to go back to the default layout: Exit the "All cardholders" screen, go to the application folder and delete the "_bp.rpx" file.

3.8.4. All cardholders - Biometrics data

This screen allows creating, modifying and deleting cardholder fingerprint templates directly from the "All cardholders - General" screen, through the 'Biometrics data' button.

Operating Mode

Once a biometric reader is configured for use as an 'Enrollment reader', it is possible to enroll fingerprints for existing users. The information created during the enrollment process is stored as a 'Template'. Template contains one fingerprint, its associated card code and other related data. Each template is save twice: in the PRONET PLUS database, as well as in all the active biometric readers.

- In the current screen, select the relevant biometric reader from the combo list (This list displays only readers defined as 'Enrollment readers').
- Press the 'Enroll' button for fingerprint enrollment, then follow the instructions on the screen. The message "PLACE your finger on the sensor" should appear.
- Put the finger on the reader until the graphical image of the fingerprint appears on the screen and the message changes to "Remove finger. Ready to save".
- Press the 'Save' button for saving this fingerprint and for downloading it to all the active biometric readers.

Fields

Select an enrollment reader: from the active enrollment biometric readers drop-down list.

Step 1: Enroll your fingerprint:

Enroll: Click to enroll a fingerprint or to re-enroll an existing fingerprint.

New: Add supplementary templates for same cardholder. In each new template a different finger can be enrolled or a previous existing finger. Enrolling an existing finger twice, enhances the chance that fingerprint will be recognized by the biometric unit.

Delete: Delete the template from the database and remove it from the biometric readers. A progress bar in the bottom of the screen will give an indication of the delete process.

Fingerprint picture:

- **Quality**: Template quality score. The minimum satisfying score is **50** (3 blue stars).
- **Content**: Template content score. The minimum satisfying score is **70** (4 blue stars).

Step 2: Accept the template:

Finger: Indicate which hand finger has been enrolled.

- **Make duress finger**: Check this box if this finger is only use in duress situation.

Security Threshold: Threshold related to the quality and content of the fingerprint information.
Note: The 'None' threshold may be selected, enabling, for instance, the director's fingerprint to be accepted even with a failed verification. (Note however, that such setting creates a security risk in case the director's card was stolen).

Download Template: Click to download the current template to all the biometric readers of the system. A progress bar in the bottom of the screen will indicate the status of the download.

Buttons [|◄][◄] [►][►|]: Browse between the different templates of the cardholder.

Save: Click for saving the current template and for downloading it to all the biometric readers.

Exit: Click for close this screen.

Tips & Notes

Suggested Fingers type

It is recommended to use index, middle or ring fingers. Avoid using thumb and pinky fingers since they are typically awkward to consistently position on the sensor.

Finger Placement

By putting the finger on the reader, cover completely the entire area of the sensor with the fingerprint for providing the best performance. Touching the sensor as if pressing a button creates an image that lacks information-rich fingerprint data.

Deleting Cardholder Templates

When a cardholder is deleted, all his templates regardless of the card serial number are removed from the biometric readers and deleted from the database.

Managing Badges

If a cardholder loses his badge and wishes to receive a new badge without the need to re-enroll his entire fingerprints, follow these steps:

- In the "All cardholders" screen, select the relevant cardholder from the combo list.
- Press the 'Edit' button to open the "Badge" screen.
- In the 'Code' field enter the code of the new badge, and save the record.
- Select the 'Advanced setting' checkbox and press the 'Calculate 1' button. This will re-calculate the Bio ID according to the new card code.
- Save and exit this screen and return to the "All cardholders" screen.
- Click 'Biometric data' and press 'Download template': the application will then remove the old templates and download the same templates but with the new Bio template ID.

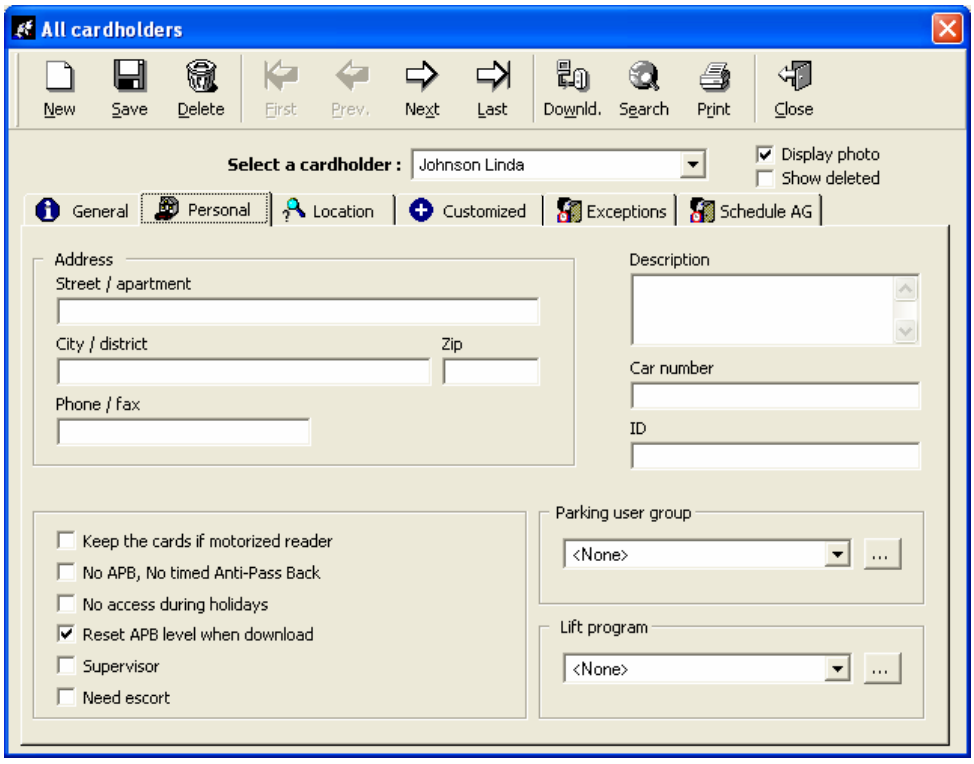
Downloading Interruption

In case of temporary communication failure during the templates download process, the action will be stored as a pending command. Later, when communication is regained, the pending commands will be executed.

3.8.5. All cardholders - Personal

This screen records personal information about the badge holder.

Fields



Address: Enter the badge holder's address, including phone and fax numbers

Description: Describe the new data entry

Car number: Enter the employee's car licence number; the parking lot module of the application will use this data.

ID: Give an employee identification number such as a social security number, employee number, etc.

Privileges: Certain privileges can be granted or restricted to badge holders

- **Keep the cards if motorized reader**
- **No APB, No timed Anti-Passback**
- **No access during holidays**
- **Reset APB level when downloaded,** (selected by default)
- **Supervisor**: Check the box to define a cardholder as supervisor.
  Note: The supervisor is an employee who can escort other cardholders and/or initiate automatically a global reflex, which sends the code 99 to the PC, by presenting his card twice consecutively – within 15 second - to a single reader.
- **Need escort**: Check the box to request an escort for this cardholder.
  Note: The escort function requires a double valid card reading within a 10 seconds delay - the employee who needs escort and his escort - to authorize access at certain readers. To set this feature at a specific reader, first select 'Escort' at this reader in the "Parameter – Controller – Reader – Access Mode" screen.

  Simple escort: Neither "Need Escort", nor "Supervisor" options have been selected. All cardholder can be escorted by any other (authorized) cardholder.

  Escort with supervisor: The "Need Escort" option has been selected. This cardholder can be escorted only by a Supervisor, i.e. another cardholder for which the "Supervisor" option is selected.

  Note: If the "Need Escort" and "Supervisor" options are selected, the cardholder will not need any escort to access, even on a reader where the 'Escort' option is selected.

Parking user group: Select a parking users group from the list or create a new group by clicking on the **[…] button**; this information is for use in the parking module

Lift program: Select the lift authorization group from the list or create a new group by clicking on the **[…] button**; this information is for use in the lift module

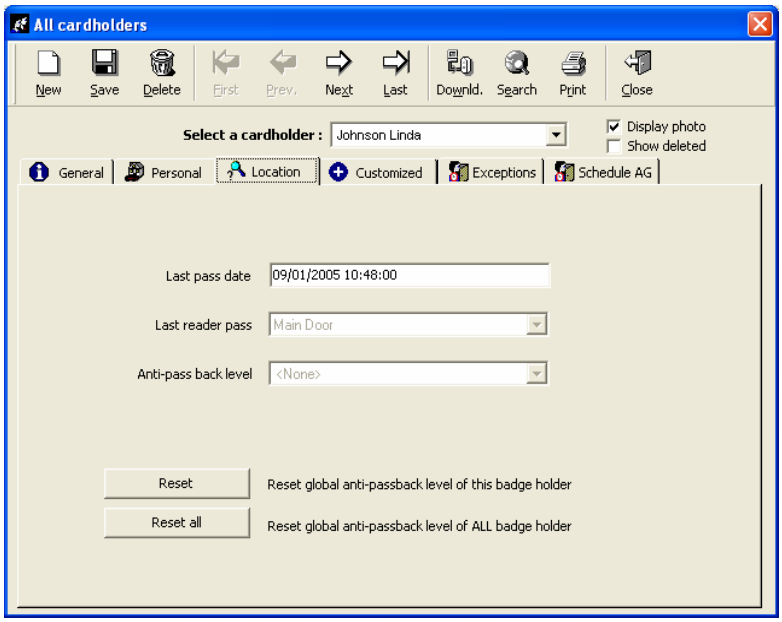
3.8.6. All cardholders - Location

Locating employees enables to check attendance and to evacuate designated areas in case of emergency. The information regarding the where abouts of a badge holder is supplied by his last passage through a reader.

Fields

Data of the last badge swipe through a reader is automatically updated by the system.

- **Last pass date** of the selected cardholder's last swipe
- **Last reader pass** of the selected cardholder
- **Anti-passback level** after the selected cardholder's passage



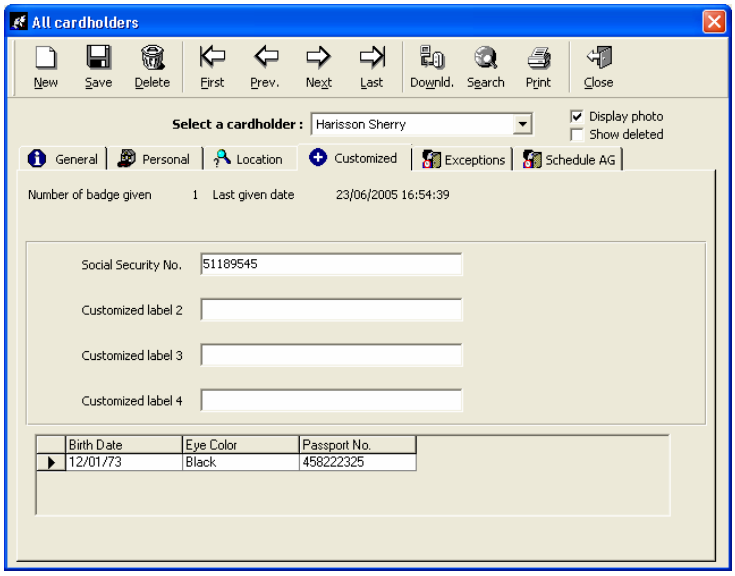
Reset button: Click on this button to reset the global Anti-Passback level for this badge holder

Reset all button: Click on this button to reset the global Anti-Passback level for all badge holders

3.8.7. All cardholders - Customized

The number of given badges and the date when the last badge was given is displayed on cardholders screen. These fields are also available in all of the cardholders reports: All cardholders, Visitors, Guards, Door pass, Patrol details).

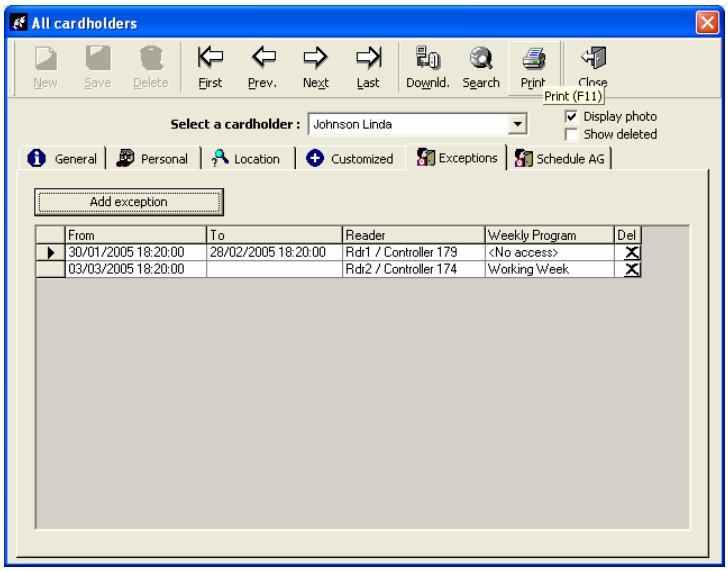
Moreover, on the present screen there are some fields to fill. Four of them can be filled with free text. The titles of these fields, called "customized labels", may be set at the "Parameter - Customized labels" screen.



In addition to these four labels, users can add an unlimited number of new fields through the "Parameter - Customized fields" screen. The fields types can be defined as Text, Date, Boolean or Number. Text and Number type fields can have a combo box for selecting customized options. The list values should be typed, separated by <;> in the appropriate field of the "Customized fields" screen.

Note: Once saved, the relevant field can be seen at the 'All cardholders - Customized' screen. After saving a new field, it is NOT possible to rename it or change its type. However, it is possible to delete it.

3.8.8. All cardholders - Exceptions



This screen permits to allow or cancel one (or more) door access to someone temporarily.

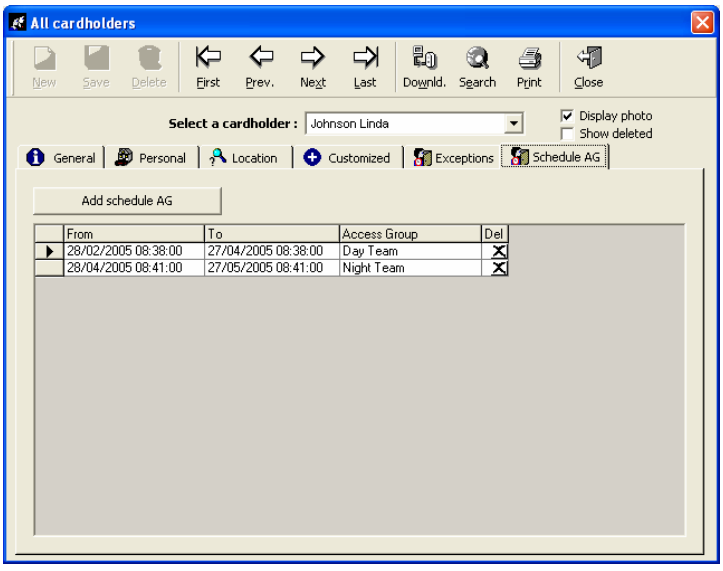
Select the relevant cardholder in the cardholders' list and click on **Add exception** button. PRONET PLUS checks all exceptions with the same frequency as cardholder validation frequency (30 min by default. Can be changed in the 'Tools - Options - Communication' screen).

For each cardholder this screen summarizes its exceptions. One row corresponds to one reader. To delete an exception, just click on the **[×] Button** at the end of the exception line.

After clicking on **Add exception** button, a new screen is opened for typing the dates and hours of the access modification and for selecting the relevant reader with the relevant weekly program. By clicking on the **Save** button, the new exception is entered in the system and displayed in the previous screen.

Note: Exception bypasses the access group definition for the selected reader(s) and comes as a complement of the current access group. However, if a cardholder access is not validated it will not be granted access on the reader even if an exception has been defined.

3.8.9. All cardholders - Schedule AG



This screen permits to swap the access group (AG) of someone to another AG temporarily.

Select the relevant cardholder in the cardholders' list and click on **Add schedule AG** button. PRONET PLUS checks all AG schedules with the same frequency as cardholder validation frequency (30 min by default. Can be changed in the 'Tools - Options - Communication' screen).

For each cardholder this screen summarizes its AG schedules. One row corresponds to one AG schedule. To delete an AG schedule, just click on the **[×] Button** at the end of the line.

After clicking on **Add schedule AG** button, a new screen is opened for typing the dates and hours of the AG modification and for selecting the new temporary AG. If the modification is immediate, there is no need to define a starting date. If the end date is omitted, the modification is considered as definitive. For saving, just click on the **Save** button.

Note: The new temporary AG is not added to the current AG but it replaces it.

3.9. Visitor

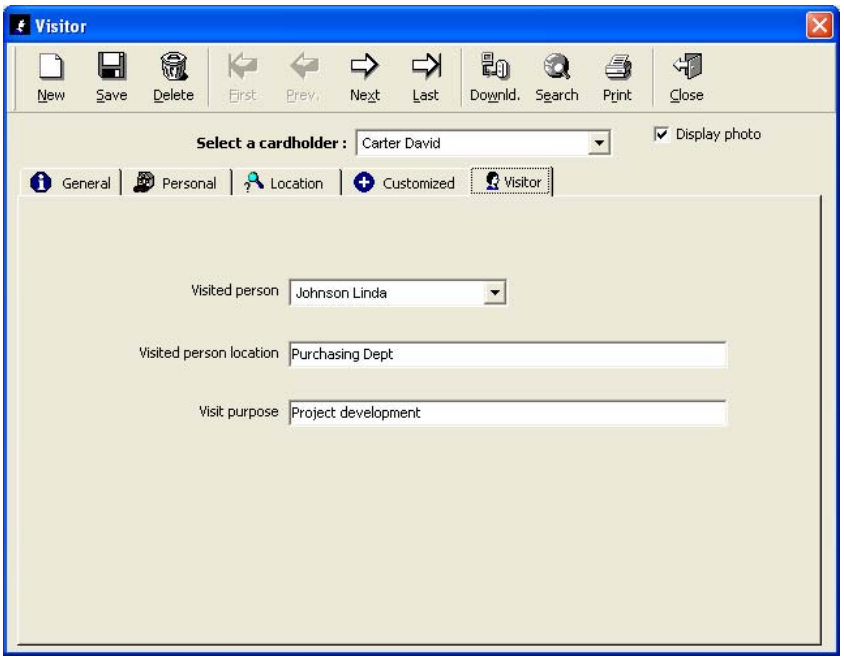
The system distinguishes occasional visitors from employees. The “Parameter - Visitor” screen allows consulting and modifying information with respect to visitors only.

Example

This enables the secretary at the entrance of the building, or the guard, to create a temporary badge for visitors without having the need to access the main employees database.

Note: This screen is identical to the “Parameter - All Cardholders” screen except that the “Type” field is set to visitor and does not appear on the screen.

When a cardholder is defined as “Visitor”, the new tab “Visitor” is added, to specify visit information.



Fields

Visited person: Select in the list of cardholders

Visited person location: Specify the requested information

Visit purpose: Specify the requested information

3.10. Multi Company Module

3.10.1. Multi Company Module - Basic Concepts

The "Company" screen is used in multi-company applications, in which several independent entities are sharing the PRONET PLUS software. In practice, each company works virtually independently from the others.

When a user logs into the system, he will only be able to consult the portion of the database (cardholder, controller, etc.) related to his company. A single user cannot consult records from all the different companies unless he gets a username and a password for each entity and logs in and off accordingly.

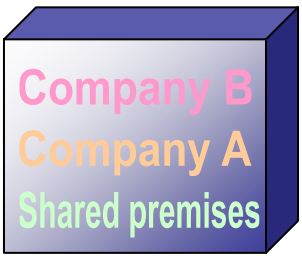
All the controllers are linked to the main workstation, which executes the actual polling job for the all system.

Usually, the installer will log in as the default user of the default company (Building Management) and has the capacity of a super-user. One entity will be created for each company. An extra-entity will be created to manage shared premises (readers).

What to do:

- Check that the plug allows the multi-company application: Open the 'Help - About PRONET PLUS' screen and check in the plug definition that the pug contains the letter "M".
- Activate the multi-company capability and display the fields related to the multi-company application: Select the "Multi-company" function in the "Tools - Options -Server" screen.
- Create the different companies sharing the application: A user should create the companies in the "Parameter - Company" screen.
- Allocate a user within each company: Create in the "Parameter - User" screen each user who will be responsible for system set up definitions for his own company.
- Modify the default name, password and company of the default user: Change it in the "Parameter - User" and "Parameter - Company" screens and remember it.
- Each user sets up the system parameters for his own company.

Example



A building beholding two companies: Company A and Company B; each company occupies its own floor and is totally independent from the other. The installer enters in the system as the default user and activate the "Multi-company" function in the "Tools - Options - Server" screen. Then, he creates the following companies: "Company A", "Company B" and "Shared Premises" and modifies the name of the default company; the common entrance is managed by a separate entity created for this purpose.
Then, he creates the following users: Irvin from Company A, Alan from Company B and Patrick from Shared Premises, allocate each of them his own company and modifies the default user name and his default password. Irvin can enter in the system and sets all Company A parameters, such as controllers, cardholders... Alan can enter in the system and sets all Company B parameters and Patrick can enter in the system and sets all "Shared Premises" parameters.

Tips & Notes

Default User

By default, the system defines a user (name: ACTEC, password: ACTEC) for the default company called "Building Management".

Displaying the current user name

The name and the company of the current user are always displayed in a white box at the far right of the tool bar.

Multi-site application

The multi-company application can be used for multi-site installations. The central database encompasses the information about all the companies. The multi-site manager will receive a user name and password for each site. He will be able to enter the different sites and control the events within each entity.

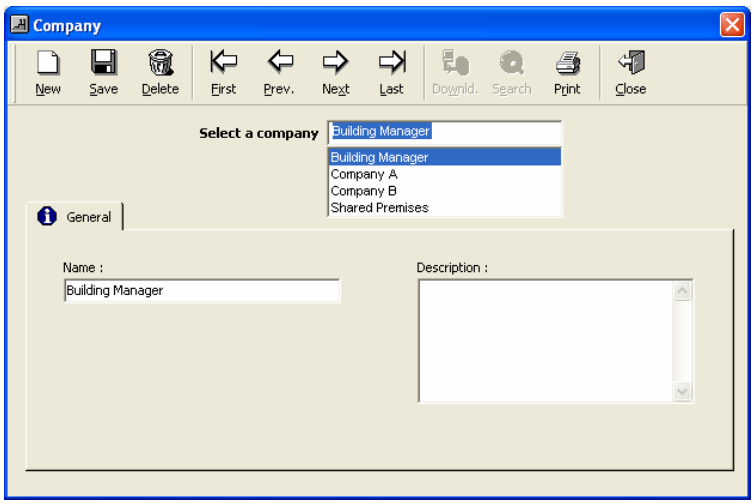
3.10.2. Company

The "Company" screen is used to create new companies in a multi-company application.

Fields

Name: Name the new company

Description: Describe the new item



3.10.3. Super-User

The super-user is a special user whose functions are:

- Creation and deletion of new companies sharing the application
- Allocation of a first user for each new each entity
- Decision on who the other super-user(s) will be
- Creation and restoration of database and journal

One super-user is required for the default company and optional for the other entities. The default user is defined as default super-user by the system. The default super-user cannot be erased; nevertheless his name can be modified. All further super-users created can be modified and erased.

Only a super-user can delete companies, all entities but his company or the default one. The possibility to create and delete a company database will not even appear on the screen of a user.

A user is defined as a super-user by selecting the option in the "Parameter - User" screen.

3.10.4. Shared Information

3.10.4.1. Ownership of records: General Rule

Each company creates its own records and can only display, modify or erase their own data. Log and displays are related to a specific company. Two companies cannot choose the same record name.

3.10.4.2. Exceptions

Cross companies

If an employee from Company A presents his badge to a reader from Company B, the access denial message will be notified to both companies.

Shared Items

The shared items and its definition are available to all in a read only mode. Only the company that owns the item can modify it.

A. Shared controller networks

By default, the default network (Network 1 on COM 1) is shared. The sharing possibility can be manually removed.

B. Shared readers

Example: Company A owns the main entrance reader. It lets Company B use that reader.

A company that owns a reader can share it, by checking the corresponding box in the "Parameter - Reader - General" screen. By doing so, the ground is set to allow all employees all companies to use the reader. The system will automatically insert this reader into the "Anytime - Anywhere" default access group of all companies and update the controllers correspondingly. From now on, all companies will be able to select the shared reader for any access group manually created.

The weekly program associated should either be:

- "Always", or whatever modified name it has, in which case the company it originates from is of no significance - recommended to keep full control of the access.
- Any other weekly program of the company that has shared the reader.

C. Shared computer

A computer can be shared between different companies. The "Log Off" function can be useful in this case.

D. Shared icons

By default, icons created by a company can be seen and used by all companies. Only the company that has created the icons can modify them.

3.11. Authorization Levels

An authorization level is a group of options and screens which can be viewed and/or modified by users who belong to the level.

Examples

- The site manager has access to all the information
- The parking lot attendant can only modify information regarding parking and view user details
- The secretary at the entrance of the building can only create visitors' badges

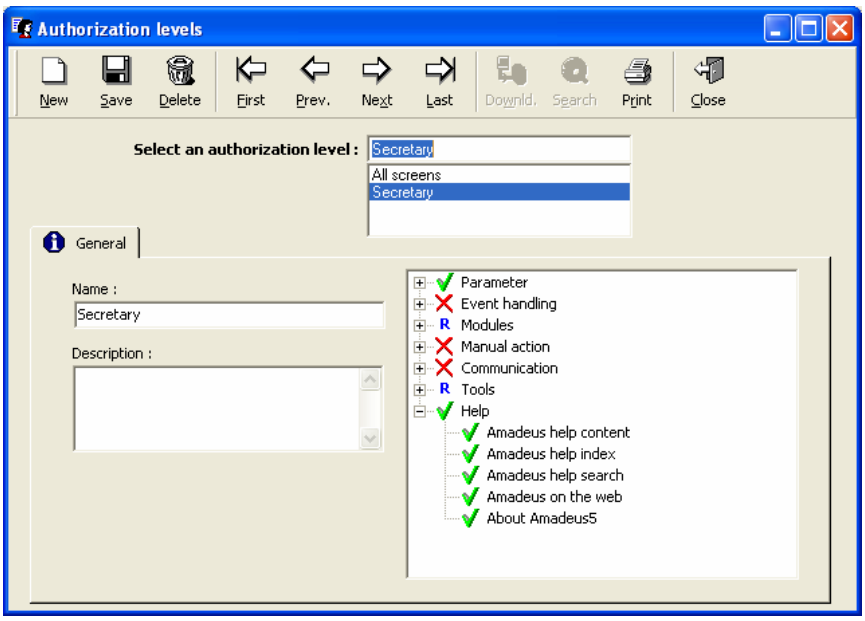
Once authorization levels have been created (through the following screen), they must be attributed to users in the "Parameter - User" screen.

Fields

Name: Name the new authorization level

Description: Describe the new data entry

View: Determine the authorization level for each option and menu. The + symbol indicates a head of chapter. In order to produce the sub-menus click on the symbol + located to the left of the name of the menu.



Screen status: V or X or R

The application allows differentiating within a head chapter, the screens that are accessible, restricted and forbidden. Viewing status can be modified by clicking successively on the sign to the left of the screen definition:

- Select V, to define accessible screen (read, write and delete)
- Select X, to define forbidden screen
- Select R, to define restricted screen (read only, without modification)

By changing the status of the head chapter, it applies automatically the same status to all sub-menus that it contains. For example, if access to a head chapter is X to a group of users, access to all sub-menus will automatically be X. But, the status of sub-menus can be changed individually.

Tips & Notes

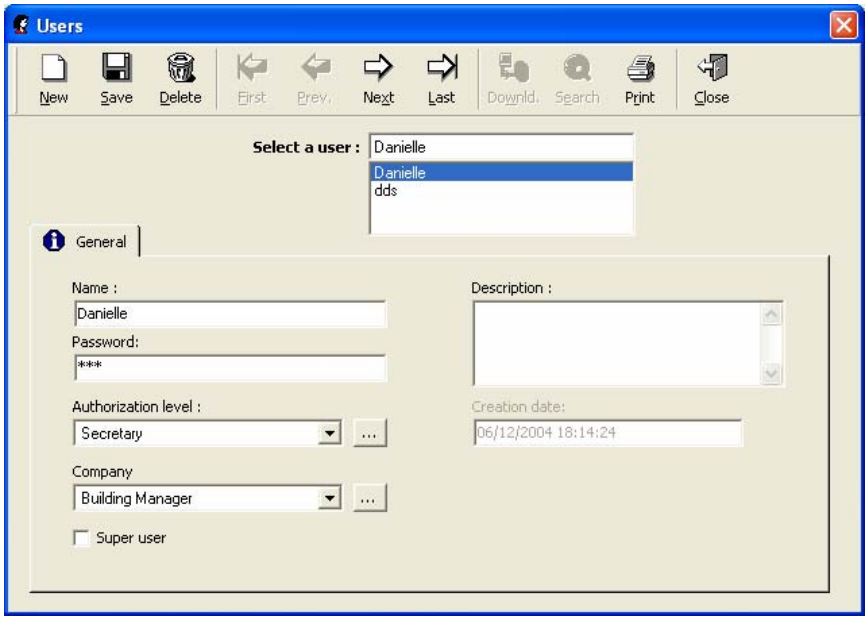
Authorization level by default

By default, an authorization level – "All screens" – is defined. It corresponds to a maximum accessibility (all options and screens are accessible). Its denomination can be modified but this level can neither be deleted nor modified.

3.12. User

An User is a person who can access the PRONET PLUS application. Creation of users with attribution of authorization level and password are allowed in this screen.

In order to limit authorization levels within the system, it is advised to define the authorization levels before creating user data.



Fields

Name: Name the new user

Password: Type the password that the user will use to enter the system

Authorization level: Select an authorization level from the existing list or click on the **[…] button** to create another authorization level

Company (only visible by Super user): Mentions the company the item refers to or click on the **[…] button** to create another company (for use with multi-company application ONLY).

Super user (only visible by Super user): Special user whose functions are the creation of new companies, the allocation of first users within each entities and the decision of who the other super-users will be (for use with multi-company application ONLY).

Description: Describe the new data entry

Creation date: Displayed automatically by the system without possibility of modification

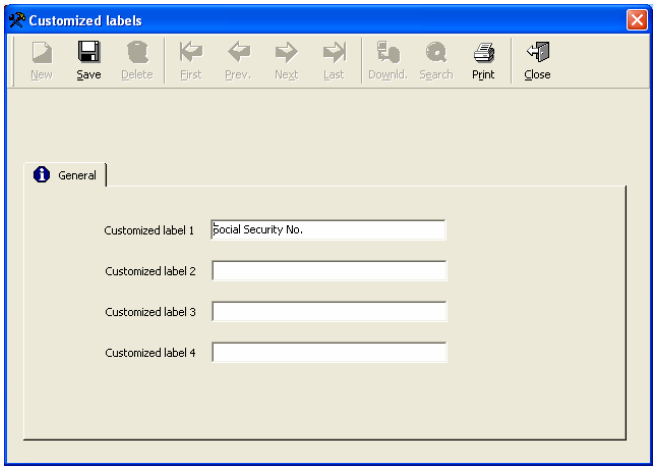
Tips & Notes

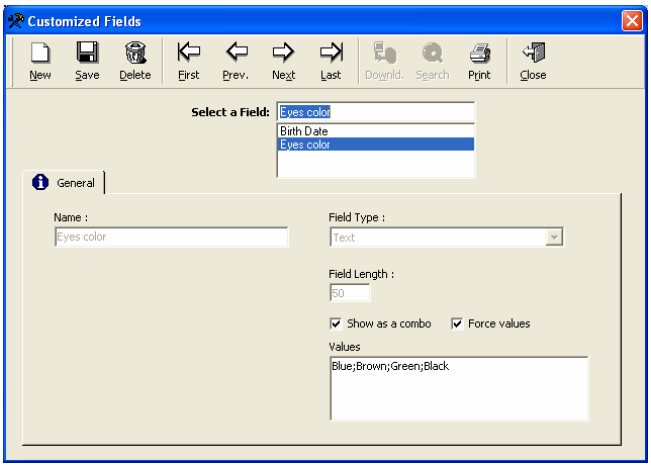
See the password

Double click on the password to make it appear on the screen.

3.13. Customised Labels and Fields

These screens allow to define the four labels of the four additional free fields and to create an unlimited number of supplementary fields available in the "Parameter - All Cardholders - Customized" screen. (See details on the 'Parameter - All Cardholders - Customized' paragraph)

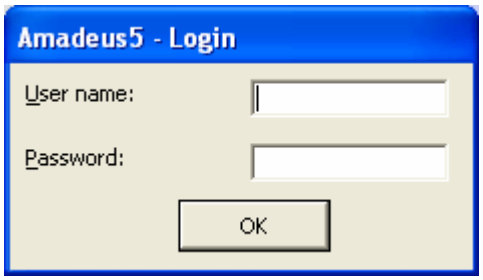




3.14. Log Off

The "Log Off" function allows different users to log in and off the system. After log off, the "Login" screen is displayed. Only authorized user, with adequate user name and password, can access the PRONET PLUS system.

This can be used to prevent system access to unauthorized users, while the program is running.

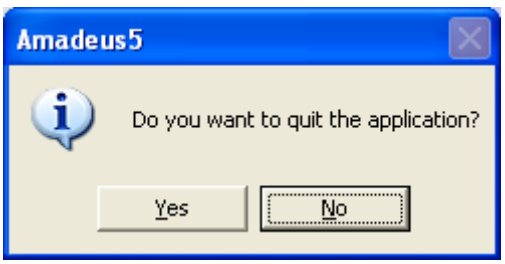


An automatic log off can be set in the system. The log off delay can be modified or cancelled in the "Tools - Options - General" screen. If selected, it is set by default to 10 minutes.

3.15. Exiting the Application

In order to terminate a work session and exit the application, choose one of the following steps:

- Click on the "Exit" icon represented by a door, at the far right of the navigation bar
- Double-click on the icon represented by a magical wand, in the upper left corner of the screen
- Click on the cross X, in the upper right corner of the screen
- Click on the "F4" function key and, at the same time, on the "Alt" key
- Open the "Parameter" menu and choose the "Exit" option (at the bottom of the list)



4. “Event handling” MENU

The “Event Handling” section of the application manages alarms, presents them graphically on maps, creates actions and processes and combines them in global reflexes following certain events.

Icons, maps and position

The graphical functions of the PRONET PLUS software integrate the dynamic display of inputs on installation maps.

- Define icons (“Event-Handling - Icon” screen), certain icons are defined by default
- Link the icons to the inputs (“Parameter - Controller - Input” screen)
- Define site maps (“Event-Handling - Maps” screen)
- Position the inputs on the maps (“Event-Handling - Position” screen)
- Display the final status in the “Event-Handling – Active alarms” screen

Operating Mode of the “Event Handling” menu

- Define the inputs
- Gather the inputs into an input group (if necessary)
- Define the outputs
- Gather the outputs in an output group (if necessary)
- Define the action to set off, following an input or group of inputs activation
- Define the process, in other words, the sequence of actions
- Define the global reflex, in other words, the events that generates the reflex and the actions to trigger

4.1. Icon

Icons are graphical symbols, attributed to input, output, map, process or action. They will positioned on maps and will be used dynamically in the “Event-handling – Active Alarms” screen.

Icons of controllers’ inputs and outputs are created by default.

Basic graphical symbols are supplied in the directory:

“C:\Program Files\Amadeus5\Media\Icons”

Other icons can be added by specifying their name, description and location on the disc. They are automatically stored with all the icons in the directory mentioned above.

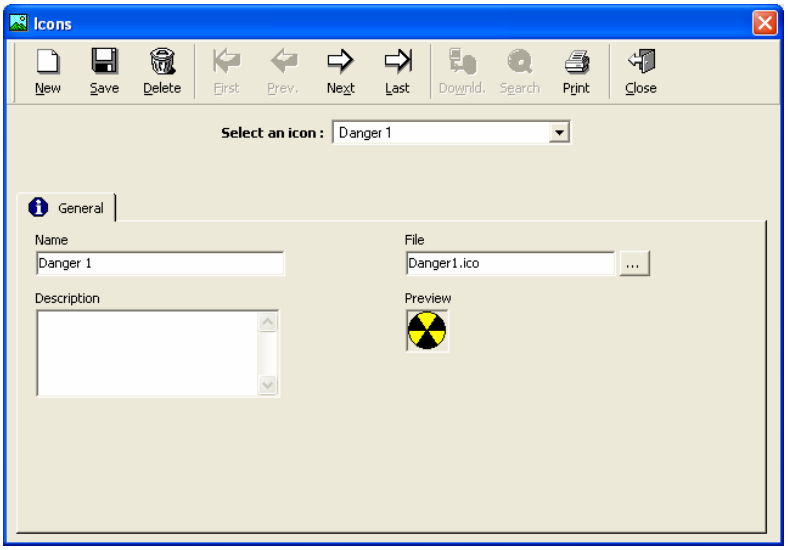
Fields

Name: Type the icon name

Description: Describe the new data entry

File: Select the name of the file beholding the associated graphical symbol; click on the **[…] button** to chose another file and specify its address.

Preview: Display the image of the selected icon

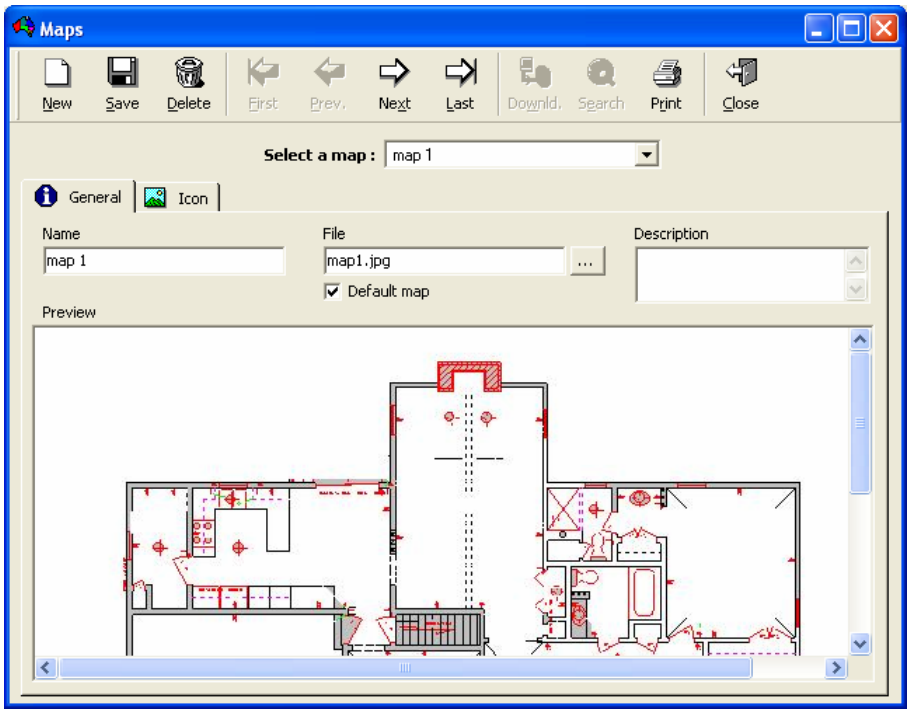


4.2. Map

The “Maps” screen allows the integration of maps into the software. In order to use the “Active Alarms” function, inputs must be positioned on maps.
It is advised to store all maps in the following directory:
“C:\Program Files\Amadeus5\Media\Maps”

4.2.1. Map - General

A cascade of maps can be defined. For instance, the maps representing the different floors can be linked to the map of a multi-floor building.



Fields

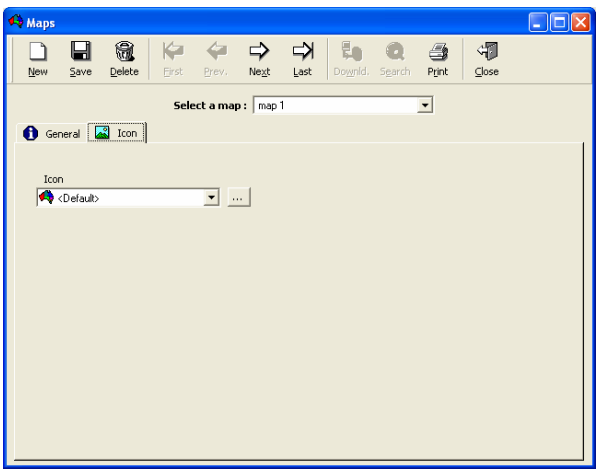
Name: Type the name of the map

File: Display the name of the file beholding the map; click on the **[…] button** to choose another file and to specify its address.

Description: Describe the new data entry

Default map: Check the box for setting the selected map as default map; it will be displayed automatically on opening the “Active Alarms” screen.

Preview: Display the map selected



4.2.2. Map - Icon

This screen enables the association of icons to maps.

Field

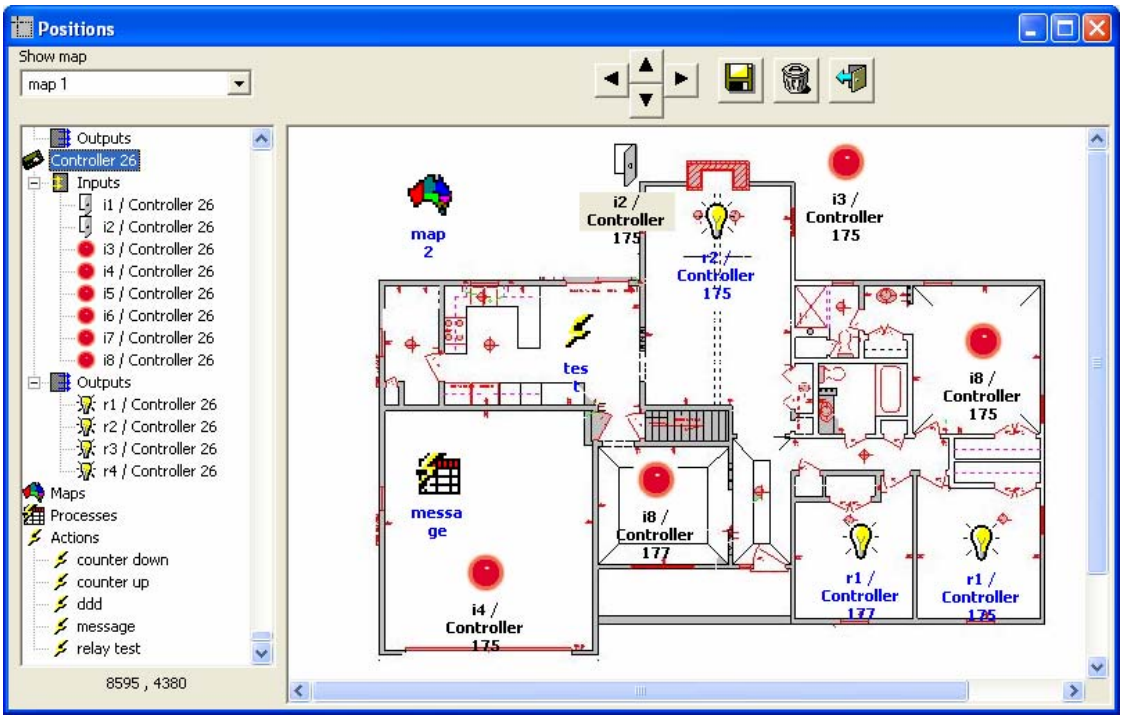
Icon: Select the icon to associate to the map from the list, or select the **[…] button** to create a new one.

4.3. Position

The “Position” option allows the positioning of inputs, outputs, maps, processes and actions on the maps.

In the left window are listed active controllers, inputs, outputs, maps, process and actions.

Drag the icon form the left column and drop it into the map, then save the positioning. Fine-tune the placing with the arrows. Once positioned, the item will disappear from the list, indeed each icon can only be positioned once on one map. The icons will be used in the “Event-Handling - Active Alarms” screen.



Fields

Show map: Choose the map to be displayed from the list

Left Window:

- Controllers list with inputs and relays
- Maps list
- Processes list
- Actions list

Buttons [◄], [▲], [▼] & [►]: Click on the four direction arrows to refine the selected icon positioning on the map with accuracy.

Button [🖫] : Click to save the selected icon positioning

Button [🗑] : Click to remove the selected icon from the map and place it in the list again

“Exit” Button (at the far right): Click to exit from the “Position” screen.

Tips & Notes

Positioning

Modifying the input position on the map can be done using a mouse: select the object, maintain the left mouse button depressed and move the mouse towards the new position.

4.4. Input Group

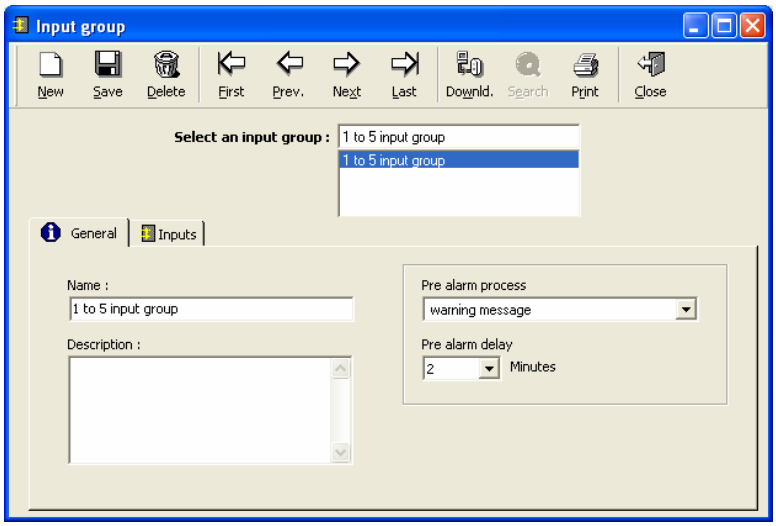
Inputs can be logically associated into group of inputs. The inputs can belong to one controller or to a series of controllers. The group is activated or deactivated in a single command. If a group of inputs has been activated, then all the components of that group are activated.

This screen enables the definition of the group and its components. A group of inputs is used to define global reflexes.

Example

Grouping all the protection system inputs of a room, such as movement detectors or windows and doors opening devices. A single command will allow render the group status from active by night to normal mode by day.

4.4.1. Input Group - General



Fields

Name: Name the input group

Description: Describe the new data entry

Pre alarm process: If needed, select the process that must be triggered before the input group activation.

Pre alarm delay: Delay between the pre alarm notification process and the input group activation. Each alarm zone may have a pre alarm notification delay from 1 to 120 minutes prior to the input group activation.

Tips & Notes

Intrusion pre-alarm notification

This function allows the application to notify the occupants of a site about a soon coming activation of the intrusion alarm system in their current area. To activate this function, select in this screen the warning process and the delay that the users have either to leave the zone or to postpone the activation of that zone for X minutes by a pre-defined action (such as pass a card, push a button, etc.).

Operating Mode :

- Exit the application and look for the ini file at the main application folder.
- Open it and look for the following entry:

  ```
  ControllerInputGroup = 0
  ```

  If this line does not exist, run the application, go to "Tools - Options" and click "OK". This operation rebuilds the ini file and inserts all the possible entries according to the latest application version.
- Set the value to 1
- Save and close this file, then restart the application.
- Make sure the 'Alarm definition for group of input' option from the "Tools - Options - General" screen is selected,
- Create an input group that defines the alarm zone.
- In the "Event-Handling Program – Alarms" screen, choose the "View groups of inputs" option and select a weekly program for the input group,
- Create a process that will serve to notify the occupants about a soon coming activation of the intrusion alarm system (for example, by activating a relay connected to a buzzer during 20 sec., lighting a red light, etc.),
- In the input group screen, select this warning process and a pre alarm delay from 1 and 120 minutes.
- Initialize all the controllers.
- To set a postponing of the input group activation, create a global reflex that triggers an action from the type: "Input Group Deactivation During...", by setting the input group to postpone and the number of seconds/minutes for which the input group activation should be postponed.

Example :

The alarm inputs of the 3rd floor are set, as an input group, to be activated at 20:00.

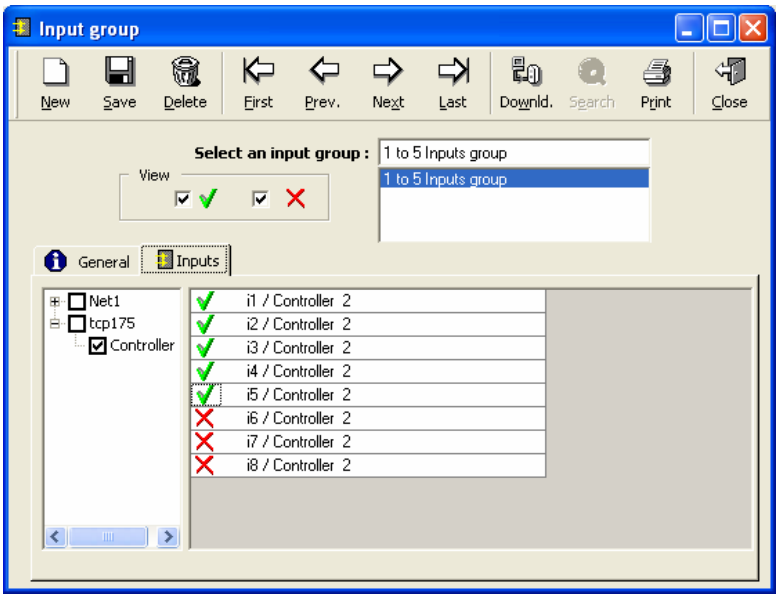
- The pre-alarm delay is set to 15 minutes, with a warning process that activates a buzzer for 20 sec.
- A global reflex postpones the intrusion system activation for 60 minutes in case a valid card is passed at the kitchen reader.

At 19:45 the PC activates the buzzer, reminding the employees of the 3rd floor that they have 15 minutes to leave the building or to postpone the intrusion system activation.

At 19:55 one of the employees passes a card and by that moves the activation one hour forward to 20:55. (I.e., the PC sends a command to the controller to postpone the inputs activation.)

The PC will activate the next buzzer warning 20:40, 15 minutes before the new activation time.

4.4.2. Input Group - Inputs



Fields

View:

- Check **V** button to display the inputs list included in the input group
- Check **X** button to display the inputs list excluded from the input group

Controllers list: Select the required controllers. Inactive controllers are represented in grey.

First column of the table: **V** or **X**

- Select **V** to include the input in the input group
- Select **X** to exclude the input in the input group

By default, all the inputs from the list are excluded from the input group.

Input: List of all inputs of the selected controllers

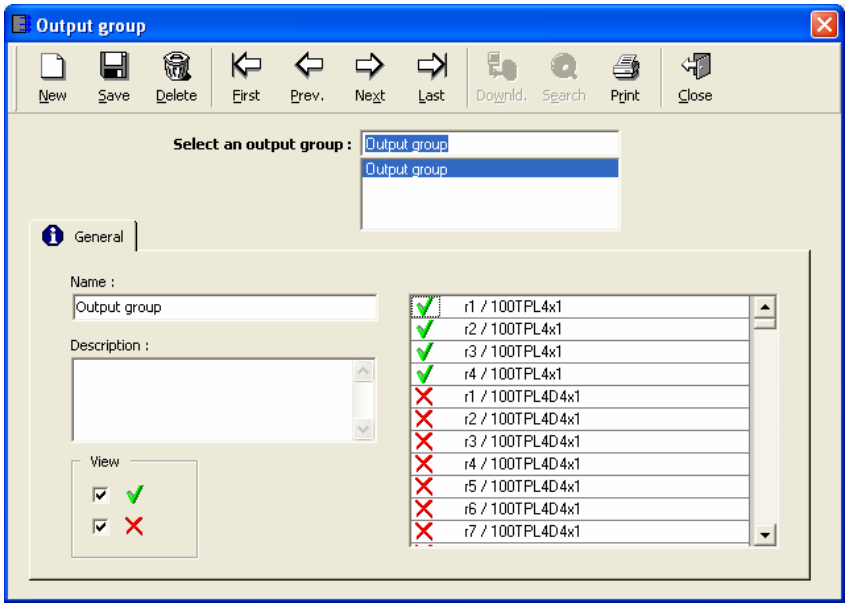
4.5. Output Group

Outputs can be logically associated into group of outputs. In a group, the outputs can belong to one controller or to several controllers. The group is activated or deactivated in a single command. If a group of outputs has been activated then activation of all the components of that group is set off.

This screen enables the definition of the group and its components. A group of outputs may be used in actions (through the 'Action' screen), which can be triggered by global reflexes.

Example

Activating of an output group (for example all the door relays) upon a fire alarm.



Fields

Name: Name the output group

Description: Describe the new data entry

View:

- Check **V** button to display the outputs list included in the output group
- Check **X** button to display the outputs list excluded from the output group

First column of the table: **V** or **X**

- Select **V** to include the output in the output group
- Select **X** to exclude the output in the output group

By default, all the outputs from the list are excluded from the output group.

Output: List of all outputs of the database

4.6. Action

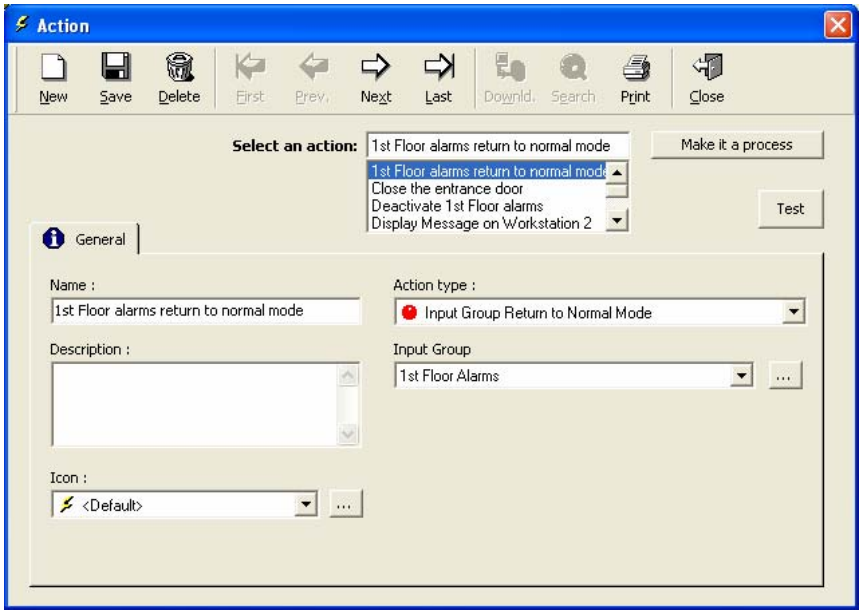
All actions available in the application are listed in the "Event handling - Action" screen. They can be sequenced within a process and incorporated into global reflexes. The actions are created in this screen; they can be activated via:

- Icons positioned on maps
- Processes encompassing these actions
- Global reflexes encompassing these processes

New and personalized graphical interfaces can be created using the actions by linking several menus and sub-menus through actions icons. When specific users log in, the new interface will appear while the software application stays hidden in the background. This is achieved by opening the "Event Handling - Active Alarm" screen on the login of a specific user with a selected default map.

Operating Mode

- Select a new background / new map ("Event Handling – Map" screen)
- Create new actions ("Event Handling – Action" screen)
- Place the actions icons on the new interface ("Event Handling – Position" screen)
- Visualise the new interface ("Event Handling – Active Alarms" screen)



Fields

Make it a process: Click on this button to create directly a process beholding this single action. The action needs to be saved prior to the process creation.

Test: Click on this button to test the selected action.

Name: Name the new action

Description: Describe the new data entry

Icon: Choose the icon representing the action in the list, or click on the **[…] button** to create a new one.

Action type: Select the action type from the list

Other Parameters: Complete the supplementary fields depending on the type of action selected (see the "Types of actions with parameters" table).

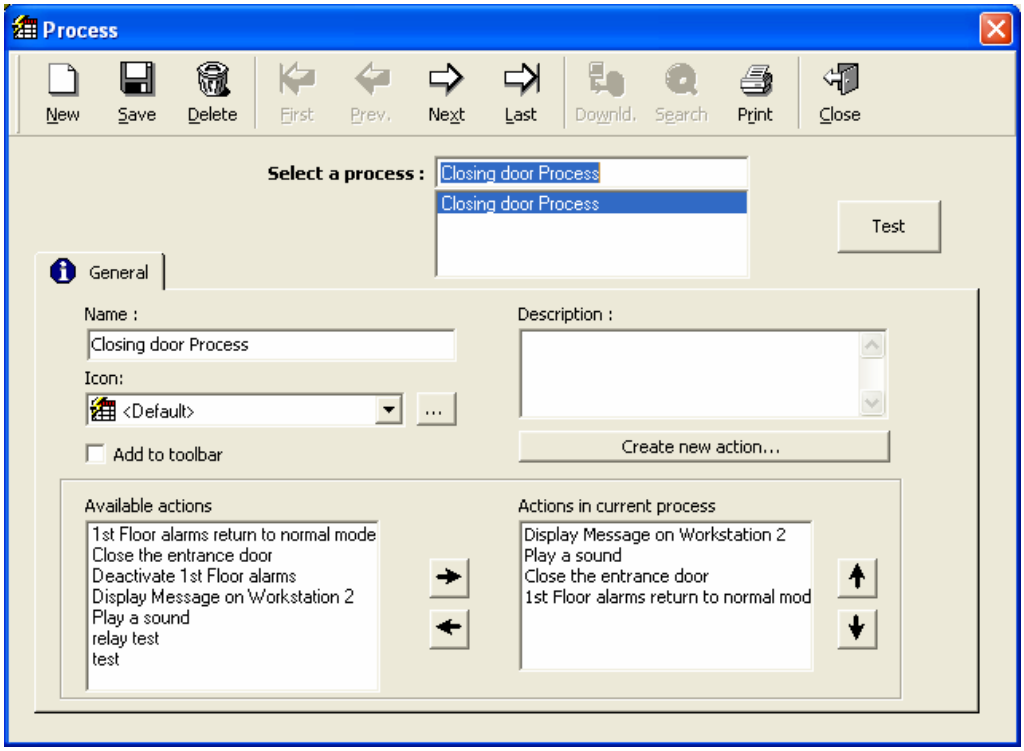
Types of actions with parameters

Action type	First parameter	Second parameter
Relay Activation	Output	- Return to Automatic Mode - NORMAL - Activated during: Delay (sec) - Always activated - constant ON - Never activated - constant OFF
Relay Group Activation	Output group	- Return to Automatic Mode - NORMAL - Activated during: Delay (sec) - Always activated - constant ON - Never activated - constant OFF
Activate group of inputs	Input Group	
Input Group Deactivation	Input Group	
Input Group Deactivation During …	Input Group	- Deactivated during X (Sec) - Deactivated during X (Min) - Constantly deactivated - Cancel previous delay
Input Group Return to Normal Mode	Input Group	
Display a Message on PC	Message (3)	Computer
Play a sound	Choose a sound file	Computer
Open a screen	Select a screen	Computer
Execute external application	Command line (3)	
Print existing report	Report (.rpx)	
Preview existing report	Report (.rpx)	Computer
Export existing report	Report (.rpx)	Filename / Export format
Invalidate cardholder	Cardholder	
Validate cardholder	Cardholder	
Import cardholders	Select a profile	
Save database	Save as… (1)	
Save journal (2)	Save as… (1)	
Create new journal (clean) (2)	Save as…	
Resume polling		
Stop polling		
Send message to communication port	Communication settings	Command line (3)
Connect distant network and read transactions	Controller network	
Reset parking zones	Parking zone	
Start a guard tour	Guard tour program	Guard
Increment Counter	Counter	
Decrement Counter	Counter	
Set a counter value	Counter	Value
Display a Message on Controller	Controller	Message (3)
Send a crisis level	Crisis level	
Insert Comment in Journal	Message (3)	
Display live video	Camera	Computer
Record video	Camera	Message (3)

(1) The name of the saved file can contain the saving time and date by adding to the name **<DT>** (time and date) or **<D>** (date only).
(2) Exist only with database in 'Access' format.
(3) When using it in a global reflex, the following symbols permit to display the corresponding dynamic text: Cardholder Name (**%c**) Reader Name (**%r**) Input Name (**%i**) Log Date (**%d**) Log transaction type (**%t**) Full description like in log (**%f**).

4.7. Process

A process is a set of actions used to define global reflexes. In this screen the different actions are selected and organized; their activation depends on the activation of the global reflexes they are part of.



Fields

Test: Click on this button to test the selected process.

Name: Name the new process

Icon: Select the icon associated to the process in the list or create a new icon by clicking on the **[…] button**.

Add to toolbar: Any user-defined process may be simply added to the main toolbar of the application just by checking the “add to toolbar” box on the process screen. The icon would appear on the tool bar on the next login. It is recommended to select an icon for the process that reflects its actions, such as open-door icon for a process that opens one or more doors.

Description: Describe the new data entry

Create new action…: Click on this button to create a new action.

Available actions: Predefined actions list for the process creation.

Buttons [←] & [→]: Use the horizontal arrows for inserting or extracting the predefined actions into the current process; an action can be repeated several times in the process.

Actions in current process: Sequence of the current process actions.

Buttons [↑] & [↓]: Use the vertical arrows for organizing the different actions into the current process.

4.8. Counter

A counter is a tool that measures things and activate a process according to the value of the counter.

The “Event Handling - Counter” screen defines a particular global reflex type, whose main object is the increment of a counter.

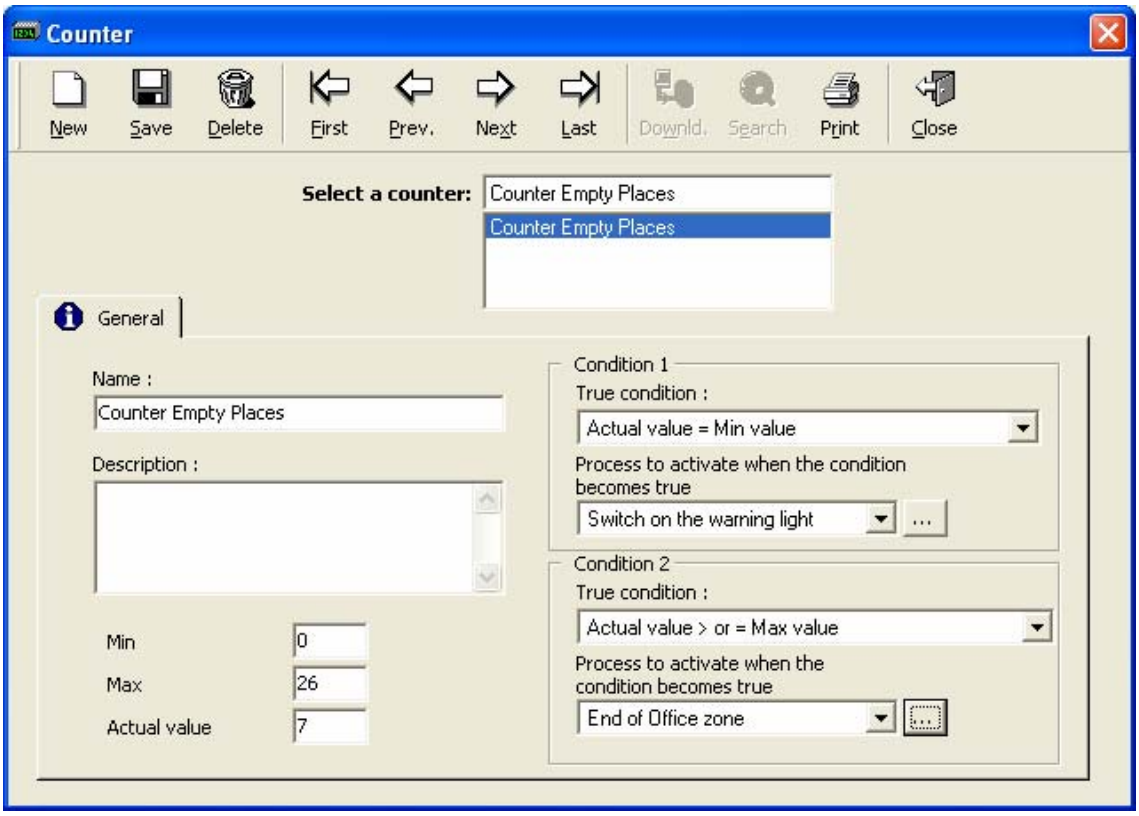
Examples

- Count the number of persons in a room (so as not to leave a room empty, to signal excess of maximum capacity, to switch office lights off when all the occupants have left, to activate an alarm system when all the employees have left the building, etc.).
- Decrement the number of entries of a membership club card after each passage and refuse access if credit is null.
- Check the filling up of a parking zone or cinema and refuse access to a full zone.

Operating Mode

- Create a counter
- Create an action/process incrementing the counter
- Create an action/process decrementing the counter
- Create a global reflex determining which event increments the counter
- Create a global reflex determining which event decrements the counter

Warning: Conditions linked to a counter may also trigger some processes: be aware not to create a logical loop: a process which trigger a counter which trigger under certain conditions the same process.



Fields

Name: Name the new counter

Description: Describe the new data entry

Min: Enter the minimum value of the counter

Max: Enter the maximum value of the counter

Actual value: Enter the actual value of the counter; this value is automatically modified by the system, when the counter is incremented or decremented.

Condition 1 & Condition 2: Define the processes to trigger following the actual counter value

True condition: Select the condition to apply from the displayed list:

- Actual value <, >, =, or not equal Min value
- Actual value <, >, =, or not equal Max value
- Min value < Actual value < Max value
- Actual value = Min value +1
- Actual value = Max value -1

Process to activate when the condition becomes true: Choose a process from the list or create a new process using the **[…] button**.

Note: The both conditions are independent.

Tips & Notes

Multiple condition counters

If more than two conditions are required, create a second counter, named as the first one, using two further conditions. Repeat this procedure as many times as necessary.

4.9. Global Reflex

4.9.1. Global Reflex - Basic Concepts

A global reflex defines the events to take into consideration and the process to activate.

The “Event Handling - Global Reflex” screen is made up of two tabs:

- General tab, used to define global reflexes
- Properties tab, used to define the event and process making up the global reflex

Note: A global reflex can be deactivated/activated in the “Event handling program - Global Reflexes” screen.

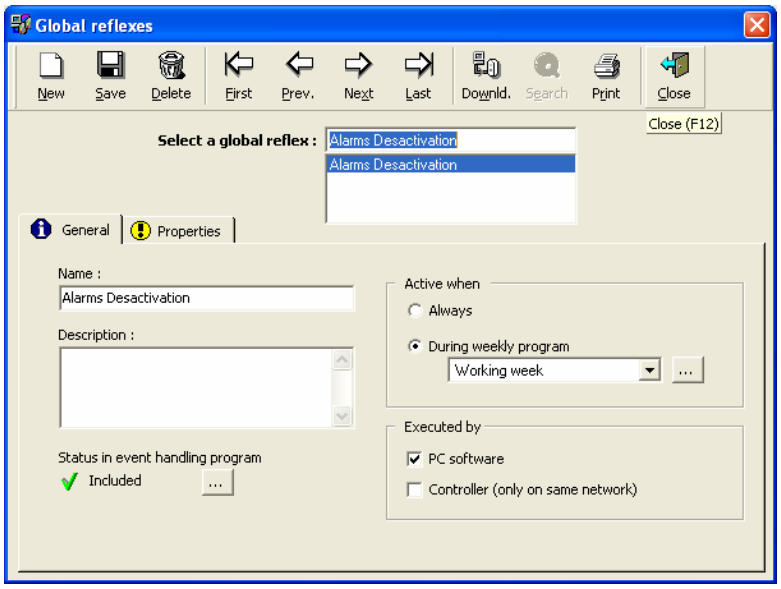
Examples

- Print instructions
- Sound a vocal file
- Display the activation of a camera in the area concerned
- Being informed of the arrival of a specific person
- Send a message to an employee when he badges
- Activation or deactivation of alarms
- Switching on the air conditioning in the office of the employee that badges at the entrance
- Light a red light if a parking is full

4.9.2. Global Reflex - General

The name, description and activation status of the global reflex are defined in this screen.

Fields



Name: Name the new reflex

Description: Describe the new data entry

Status in event handling program: The current global reflex is either included or excluded from the event-handling program; by default the global reflex is included.
In order to be activated, the reflex must be included in the event-handling program. A global reflex, which is not included, will not be activated by the system when the defined events of the program arise.
Modify the status by selecting the **[…] button**, which will lead to the display of the "Event handling program - Global Reflexes" screen.

Active when:

- **Always**: Select if the global reflex is constantly activated
- **During weekly program**: Select if the activation of the global reflex is dependent of a weekly program. The activation will occur only during the green zones of the program. Click on the **[…] button** to create or modify the weekly program.

Executed by:

- **PC software**: Check this box if the global reflex must be executed by the PC. That needs PC and controllers communication during the reflex activation.
- **Controller (only on same network)**: Check this box if the global reflex must be executed directly by the controller on which the triggering event has been defined. With the supporting controller firmware (TPL from 01/03/03 and later), CERTAIN global reflexes (Network Reflex) can be performed between the controllers themselves even at times when the PC is not running (see in the next table for type of events which can be Network Reflex). Only processes with ONE action are supported. The only supported action type is "Relay Activation" (except 'Never activated - constant OFF', not supported yet). Obviously the controller that transmits the command and the one that receives it, both need to be on the same network, either via their main communication port, or via their secondary communication port. So, there are two different modes of operation:

  Mode 1: Network Reflexes via the main communication port

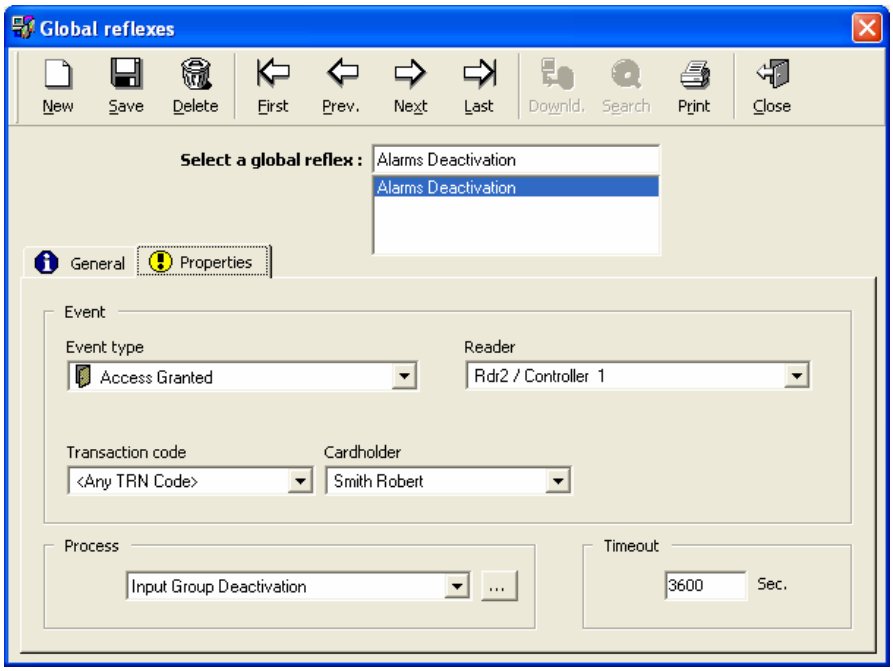
  In this mode the controller will perform network reflexes via the main communication bus, but only after 50 seconds of not receiving any polling or other commands from the PC. To activate this mode set the controllers either without secondary bus (default), or with it, but when 'Bus 2' is not set to do network reflexes (see the "Network Reflex" paragraph).

  Mode 2: Network Reflexes via the secondary communication port

  In this mode the controller will perform network reflexes via the secondary communication bus, whether or not the PC communication keeps on communicating on the main bus. To activate this mode set the controllers with secondary bus, and make sure that this bus is set to do network reflexes (see the "Network Reflex" paragraph).

4.9.3. Global Reflex - Properties

This screen defines the specific events that are going to set off the actions and their parameters.



Fields

Event: The screen is modified according to the type of event selected, displaying the appropriate number of parameters in each case.

> **Event type**: Select the suitable event from the list (Access granted or denied at specific reader for a specific cardholder, Start or end of alarm for digital inputs, Unknown or non-allocated badge at specific reader, Scheduler, etc.). The table hereafter sums up all the event types of with the parameters.
>
> **Other Parameters**: Complete the supplementary fields depending on the type of event selected (see the “Types of events with parameters” table).
>
> Note: For each parameter, the “<Any>” item is used for selecting all the elements of the list.

Process: From the list, select the process to activate following the occurrence of an event, or create a new process using the **[…] button**.

Time out: Maximum delay, between the time of the event (date and hour registered in the controller) and the time of the PC when it receives the event, beyond which the process is not carried out and the global reflex associated will not be performed (Expressed in second, maximum of 9 hours, default value = 3600 sec).

A global reflex is performed only if the delay between the recording of an event by the controller and the processing of the data by the PC is inferior or equal to this time out delay.

Example

A global reflex has been defined as follows: An input under alarm triggers the activation of a group of relays. At 10:00 AM, the input detects an alarm but the controller is ‘off-line’ (no communication with the computer). At 12:00 AM, the communication is back, and the computer receives the alarm event. Should the global reflex be triggered two hours after the event has occurred? Therefore, if the time out is 3600 sec (1 hour) the global reflex will not be triggered.

Types of events with parameters

Event type	From	1st parameter	2nd parameter
Access granted[6]	Reader[1]	Transaction code[2]	Cardholder
Access granted + duress code[6]	Reader[1]	Transaction code[2]	Cardholder
Access denied [6]	Reader[1]	Transaction code[2]	Cardholder / Denied reason[4]
Access denied + unsuccessful trials[6]	Reader[1]	Transaction code[2]	
Start of alarm[6]	Input[3]	Input status[5]	
End of alarm[6]	Input[3]		
Line short[6]	Input[3]		
Line cut[6]	Input[3]		
Status 1 to 4	Input (analog) [3]		
Table error	Controller	Table	
Low battery	Controller		
Power down	Controller		
Power up[6]	Controller		
Communication OK	Controller		
Communication error	Controller		
User acknowledgement	User	Input	
User confirmation	User	Input	
Unknown card	Reader[1]		
Non allocated badge	Reader[1]		
New record	User		
Save record	User		
Delete record	User		
Application login	User		
Application logout	User		
Arrival	Guard Tour Program	Checkpoint	Guard
Early arrival	Guard Tour Program	Checkpoint	Guard
No arrival on time	Guard Tour Program	Checkpoint	Guard
Late arrival	Guard Tour Program	Checkpoint	Guard
Scheduler	Day	Month	Hour / Minute

[1] An access group can be selected as a trigger for global reflexes associated with access. The group is signalled by a “>” sign before the access group name.

[2] When a transaction code is selected, the event is only set off if the badge holder types the transaction code on the reader’s keypad prior to swiping his badge. The transaction code is a sequence of two numbers between “00” and “99”.
In case of supervisor cards, a second badge reading within 10 seconds will send the transaction code 99 to the system, without need of a keypad.

[3] An input group can be selected as a trigger for global reflexes associated with inputs. The group is signalled by a “>” sign before the input name. Note: there is no input group by default.

[4] A specific denial can be chosen to trigger a global reflex. The different reasons of access denial are : Any denied reasons, Wrong keypad code, Full / Lock / No answer from door, Time not OK, Anti-passback not OK, Reader not allocated, Site code not OK, Inhibited cardholder, Access group.

[5] Input status are: Immediate or delayed, Immediate, Delayed.

[6] Potential Network Reflexes. Caution, for Access Granted only "any reader" or "one reader only" (Group of readers not supported yet), for Access Denied only "without denied reason", for Alarms only "one input" (Group of inputs not supported yet) and without a specific status, for Power Up only "from a specific controller" (“Any controller” not supported yet).

4.10. Event-Handling Program

4.10.1. Event-Handling Program - Basic Concepts

The “Event-Handling Program” allows the attribution of activation time zones (weekly programs) to alarm inputs and the inhibition of Global Reflexes.

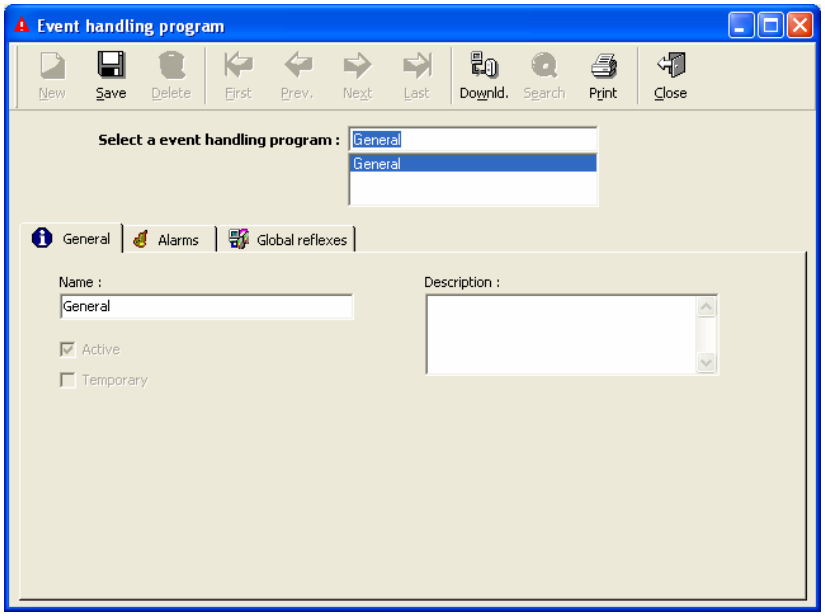
It is accessible either from the Main menu tool bar or from the **[…] button** near the Weekly Program of the ‘Controller - Input - General’ screen.

The “Event-Handling Program” screen is divided into three tabs:

- General tab: allows to describe the event program
- Alarm tab: allows to display the defined inputs, include/exclude them in the program and to change their alarm behaviour.
- Global reflexes tab: allows displaying the defined reflexes, include/exclude them in the program and, eventually, modify or create new reflexes.

4.10.2. Event-Handling Program - General

This screen allows the visualization of the active event handling program; it does not allow the creation of a new event-handling program.



Fields

Name: Name the new event handling program

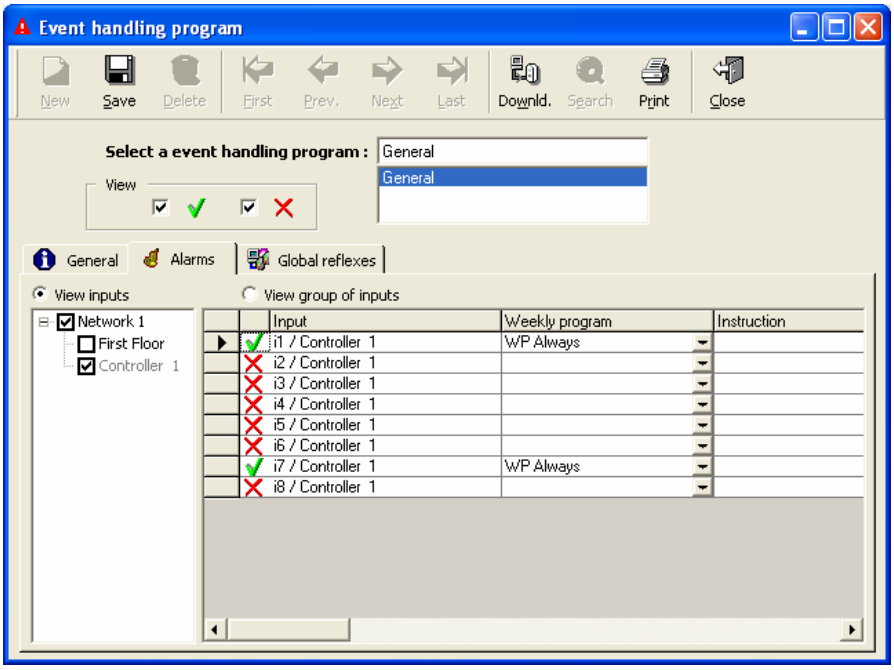
Active: Check the box to activate the selected event handling program. If a program is not “active”, it will not be taken into consideration by the system

Temporary: Check the box if the selected event handling program is temporary only

Description: Describe the new data entry

4.10.3. Event-Handling Program - Alarms

This screen allows the attribution of activation time zones to alarm inputs and to input groups.



Fields

View:

- Check **V** button to display the inputs list included in the event handling program
- Check **X** button to display the inputs list excluded from the event handling program

Option selection: View inputs / View group of inputs: This selection is visible after selecting 'Alarm definition for group of input' option in the "Tools - Options - General" screen.

- **View inputs:** Click on this button to display a list of the individual inputs
- **View group of inputs**: Click on this button for displaying the input group list with their weekly program and setting a weekly program for each input group. This saves allocating a weekly program to each individual input. ***In case of a conflict, the definition of the individual input always gets the higher priority.***

Controllers list: Select the required controllers. Inactive controllers are represented in grey

First column of the table: **V** or **X**

- Select **V** to include the input in the event handling program
- Select **X** to exclude the input from the event handling program

By default, all the inputs from the list are excluded from the event handling program.

Input: List of all inputs of the selected controllers

Weekly program: Select the weekly program associated to the input.

Note: An alarm input is only armed during allowed periods ('Green' periods) of the Daily Programs defined by the selected weekly program.

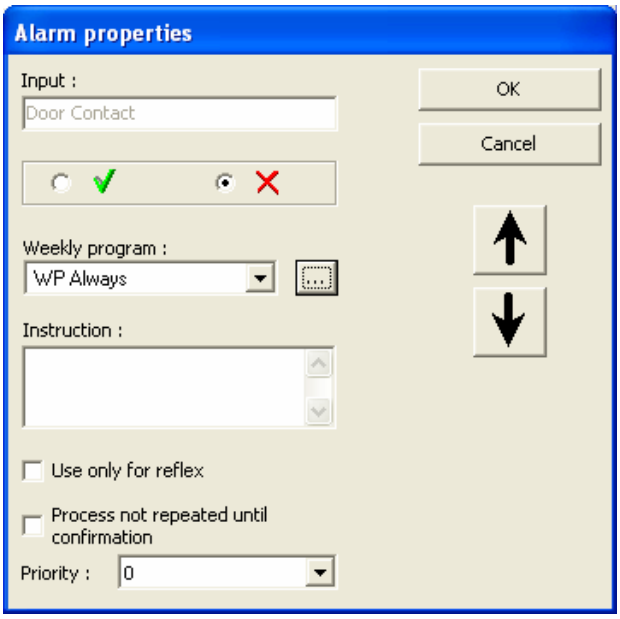
Instructions: Enter the instruction to display in the "Active Alarms" screen when the corresponding alarm is raised.

Button [...] (on the input line): Click on this button to display the properties screen of the selected alarm.

4.10.4. Event-Handling Program - Alarm Properties

The screen summarizing the alarm properties is accessible by clicking on the **[…] button** on the line right end of the input in the "Event handling program - Alarms" screen.

Fields



Input: Input name

Inclusion status in event handling program:

- Select **V** to include the input in the event handling program
- Select **X** to exclude the input in the event handling program

Weekly program: Select the weekly program from the list or click on the **[…] button** to create a new program

Instruction: Enter the instruction to display in the "Active Alarms" screen when the alarm is raised

Use only for reflex: Selecting this box indicates that the alarm is only to execute the process triggered by the input (defined in a global reflex) without raising or recording the alarm event in the journal history.

Process not repeated until confirmation: If a process must be triggered by the input and if this box is selected, the process will be activated only the first time the input goes under alarm and not on next repeated alarms (as it is the case for a movement detector, for instance). To 'rearm' the process, the alarm must be confirmed.

Priority: Select from 0 to 9, the importance order of the selected alarm

Direction arrows: Click to review the properties of the previous / next alarm

4.10.5. Event-Handling Program - Global Reflexes

This screen lists all the global reflexes defined in the database.

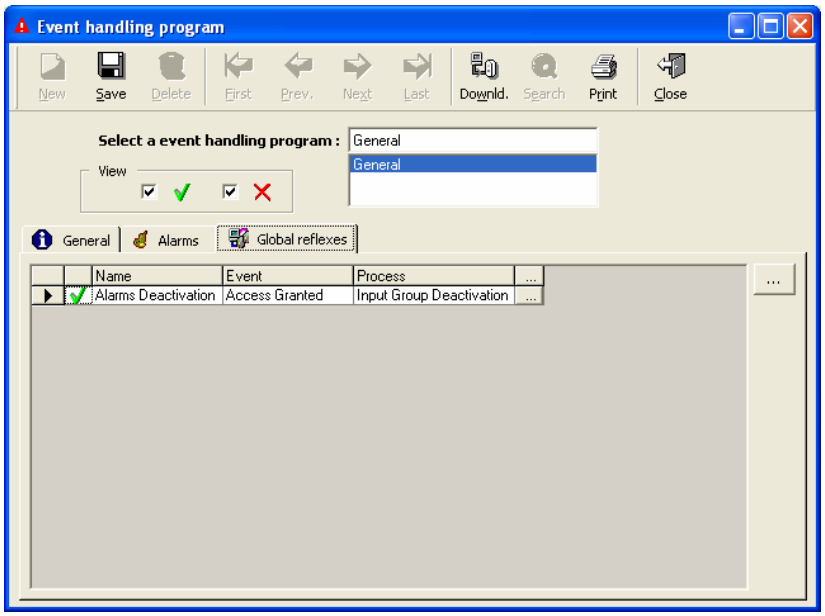


Table analysis

View:

- Check **V** button to display the global reflexes list included in the event handling program
- Check **X** button to display the global reflexes list excluded from the event handling program

First column of the table: **V** or **X**

- Select **V** to include the global reflex in the event handling program
- Select **X** to exclude the global reflex from the event handling program

By default, all the global reflexes are included in the event handling program.

Name: Name of the global reflex

Event: Event associated with the global reflex, i.e. the event that will trigger the process defined in the reflex.

Process: Process associated with the reflex, i.e. the process to be executed when the event is occurred.

Button […] (on the line of the reflex): Click on this button to display the general screen of the selected global reflex for creating, consulting or modifying data.

Button […] (outside the table): Click on this button to display the general screen of the global reflexes, even if no item is selected.

4.11. Active Alarms

The Active alarms screen graphically presents inputs, relays and alarms status on a site map. Actions and processes can be triggered by clicking on icons and it is possible to skip from one map to the next.

4.11.1. Active Alarms - Basic Concepts

Hereunder some concepts used in this manual:

- **Inputs concepts**:

Digital Input or Alarm input: a controller input point to which a sensor/detector (magnetic contacts, movement detectors, door contact device to reflect the door position, etc…) is connected. In general, controllers have by default 4 or 8 inputs and may be extended to 16 or more. The two input status open or closed correspond to the two possible physical status of such sensor/detector: open or close.

4 states or supervised input: in addition to the two basic states of the sensor/detector (open or closed), the input may detect two supplementary states which correspond to the status of the line used to connect the sensor/detector to the input: line cut or line short. Note that the alarm linked to this two supplementary status, line cut or short, is always armed, i.e. it is not possible to attribute to them a weekly program. The input type ('digital' or 'digital 4 states') must be indicated in the input definition screen.
Consult the controller documentation to check which type of inputs is available in the controller and how to connect a 4 states input.

Input status or input physical status: the physical status of the sensor/detector connected to the input: either open or close.

Input normal status: The 'normally' status of an input, either 'NO' for 'Normally Open' or 'NC' for 'Normally Closed', is the status, open or close, into which the sensor/detector connected to this input is *not* under alarm. This normal status must be indicated in the input definition screen (see 'Controller - Input' paragraph).

Input off/on or input logical status: An input is 'off' when it is in its normal status and 'on' when it is not in its normal status. It represents the logical status of the input. From the Input definition screen, two icons may be defined (and positioned on a map, as described in the 'Position' paragraph) to represent the logical status of the input, either 'on' or 'off'.

Armed/disarmed input: To each input may be attributed a Weekly Program (from the Input definition screen): the input is 'armed' during the green periods defined in the Weekly Program and 'disarmed' during the red periods (See 'Time zone' chapter for details).

Activated input: an input is activated when the following conditions are true: it is armed and its status is 'on', i.e. it is under alarm during green periods of its Weekly program.

Table of the different Digital Input Status

Input	Physical status	Normal status	Logical status	WP Activation	Alarme status
i1	Open	NO	Off	Armed	
i2	Close	NO	On	Armed	Activated
i3	Close	NC	Off	Disarmed	
i4	Open	NC	On	Disarmed	

- **Outputs concepts**:

Output: a controller output point which is in fact the output contact of a controller relay. In general, controllers have by default 4 relays and may be extended to 16 or more. Such relay gives a dry contact, and may be represented by an electrical switch which can be either open or close. When the relay is closed, the device (door, siren, etc.) which is connected to the relay is activated.

Output status: the status of the relay, i.e. open (or activated or 'on') or close (or deactivated or 'off'). As for an input, two icons may be defined to represent the output status. (in the Output definition screen)

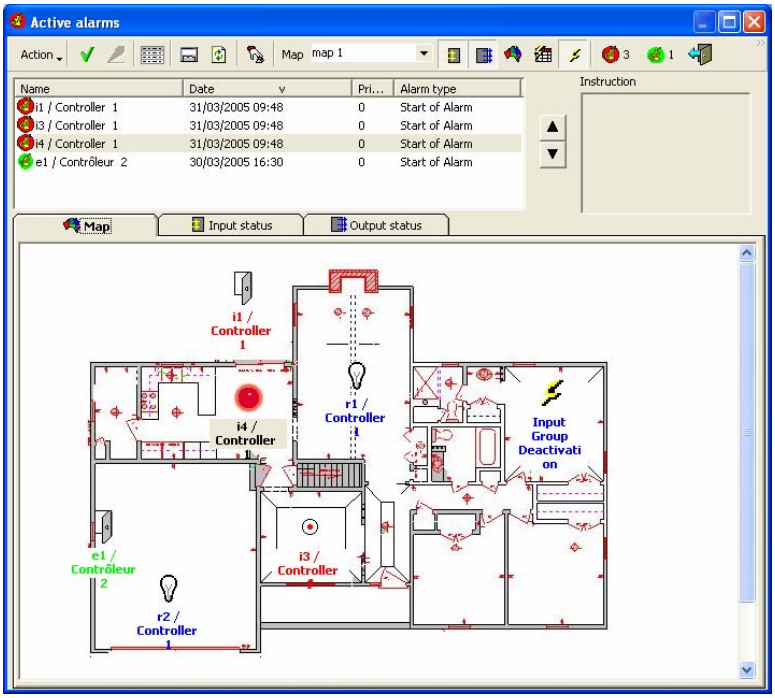
The Active alarms screen is accessible from the Main menu tool bar. It is divided into three tabs:

- Map tab: allows to display the site maps,
- Input status tab: allows to display the different status of the inputs,
- Output status tab: allows to display the different status of the outputs.

4.11.2. Active Alarms - Map

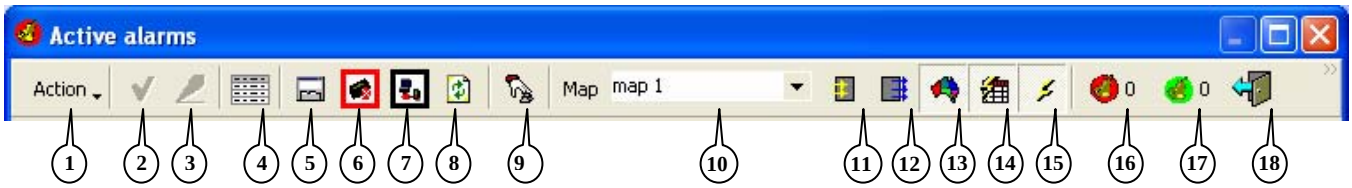
This screen graphically presents the Input/Output status and alarms on a site map.

The upper table shows the alarm name, date, priority and alarm type.



Only items (inputs, outputs, maps, actions or processes), which have an icon, positioned on the map may be displayed. How to set the icons in the map is described in the chapter "Position". Actions and processes can be triggered from the same screen by a right click on an icon. It is possible to skip from map to map.

Toolbar



The functions available from the toolbar are as follows:

1: Action menu: allows more useful actions like Execute a process, Confirm all alarms, etc.

2: Acknowledge the alarm: Select an alarm from the table and acknowledge it; this allows the differentiation between new and already acknowledged alarms. It is advisable to use this function to facilitate alarm management. When an alarm is acknowledged, the following events take place in the table of the "Event Handling - Active Alarms" screen as well as on the navigation bar:

- The alarm icon goes from red to green
- The count of acknowledged and non-acknowledged alarms are updated

3: Confirm the alarm: confirm a specific alarm, already acknowledged; a new screen appears displaying the following information:

- Name
- Event date and hour
- Alarm type: start of alarm, line cut or line short.
- Comment: type in an optional comment, such as importance, user name, etc. the comment will appear in the journal "data" column

Confirm all (from the 'Action' menu only): confirm *all* the displayed alarms using a single command. This option is useful in case of prolonged communication failure. The computer will ask for confirmation. Individual alarm acknowledgement and confirmation are not required.

4: Auto select last alarm / remain on selected alarm: to conserve or not the focus on the last occurred alarm.

5: Show / hide the active alarm table: to maximize the map on the screen

6: Communication error indication: appears when PRONET PLUS does not succeed to communicate with one controller.

7: Polling off indication: appears when the polling has been manually stopped (from the 'communication' menu)

8: Refresh: manual refresh when there is no polling or when the polling exists but the "Auto-refresh of Input/Output status" is not requested in the "Tools - Options - Server" screen

9: Open the "Execute Process" screen

10: Map selection list: Choose the map to display in the list

11: Show all inputs: Press to show all inputs / only active alarms.

12: Show outputs: Press to show / to hide relays.

13: Show maps: Press to show / to hide maps.

14: Show processes: Press to show / to hide processes.

15: Show actions: Press to show / to hide actions

16: Number of active alarms: as well as in the tool bar of the main screen

17: Number of acknowledged alarms: as well as in the tool bar of the main screen

18: Exit

Data displayed

Alarm Table: The window below the toolbar shows the actual alarms status (active, acknowledged or confirmed):

Name: Name of the alarm input. The icon before the name shows the alarm status:
- Active (red icon)
- Acknowledged (green icon)
- Confirmed (the alarm disappear)

Date: Date and time of the alarm

Priority: Alarm priority (defined in the "Event-Handling Program - Alarm Properties" screen)

Alarm type: Start of alarm, line cut or line short

Buttons [▲] & [▼]: Click on the direction arrows to select the requested alarm

Instruction: Instruction which appears when the alarm is raised (defined in the "Event-Handling Program - Alarm Properties" screen).

On the site map: Point the mouse on an icon in the map, click on the right button and choose among the following functions:

Input icons
- Acknowledge (when under alarm)
- Confirm (when under alarm)
- Open input properties
- Return to normal mode
- Input deactivation

Relay icons
- Open relays properties
- Return to normal mode
- Deactivate relay continuously (constant off)
- Activate relay continuously (constant on)
- Activate relay during, specify the number of seconds

Process icons
- Execute process
- Open process properties

Action icons
- Execute action
- Open action properties

Note: Only the actions allowed for the user will appear.

Tips & Notes

Automatic refresh

The icons status can be automatically updated by selecting the "Auto-refresh Input/Output status" option in the "Tools - Options - Server" screen. Alternatively, when the Auto Refresh is off, a manual refresh button can be used on the top bar.

Dynamic map management

In case of several maps, the displayed map is the one encompassing the activated inputs. If no alarm is signalled, the default map is displayed. If several alarms are activated, the map containing the most recent alarm raised will be displayed. If the "Event Handling - Active Alarms" screen is already open and a new alarm belonging to the displayed map is triggered, this map is dynamically updated. Actions and process can be directly executed by right clicking on their icons. It is possible to swap from map to map by selecting the required map either using the map selection drop down menu or by clicking on the appropriate icons, if such icon has been previously positioned.

How Alarms are shown

- If the 'show all inputs' button is not selected, the screen shows only the logical status of activated inputs, i.e. the armed inputs actually 'on' (active alarms). The icon appears immediately when the alarm is detected, without the need of using the 'refresh' button. The icon of an activated input stays in the map until the operator acknowledges and confirms it.
- If the 'show all inputs' button is selected, the screen shows the logical status of all the inputs defined in the "Position" screen.

The dynamic swap of icons allows for visual follow-up of input and output status: activation or deactivation of alarm points, door open or close and relays supervision.

Example: If a door alarm is detected, an icon will show an open door. If the door is closed, the icon will be updated to a closed door.

When an alarm is raised the system reacts

- Log display: alarm displayed in red
- Journal: event is recorded
- Navigation bar: increase in the number of alarms raised
- "Active Alarms" screen: the icon connected to the alarm appears on the site map displayed
- "Active Alarms" screen: mention of the name of the input activated and the date of the event in the top table
- "Active Alarms" screen: instructions related to the alarm input are displayed in the "Instruction" window.

When several alarms are detected, the last alarm is displayed in the table at the top of the "Active Alarms" screen. By clicking on an alarm icon, the cursor automatically moves towards the corresponding row. The instructions displayed correspond to the alarm selected. Note that the order of the active alarm table can be manually sorted, by clicking on the column header. Such a sort cancel the default sort (by date), and therefore the last alarm may appear in the middle of the list.

4.11.3. Active Alarms - Input Status

This screen displays a dynamic activation status of the input. Before displaying the data, it may take about 15 seconds for checking all input status.

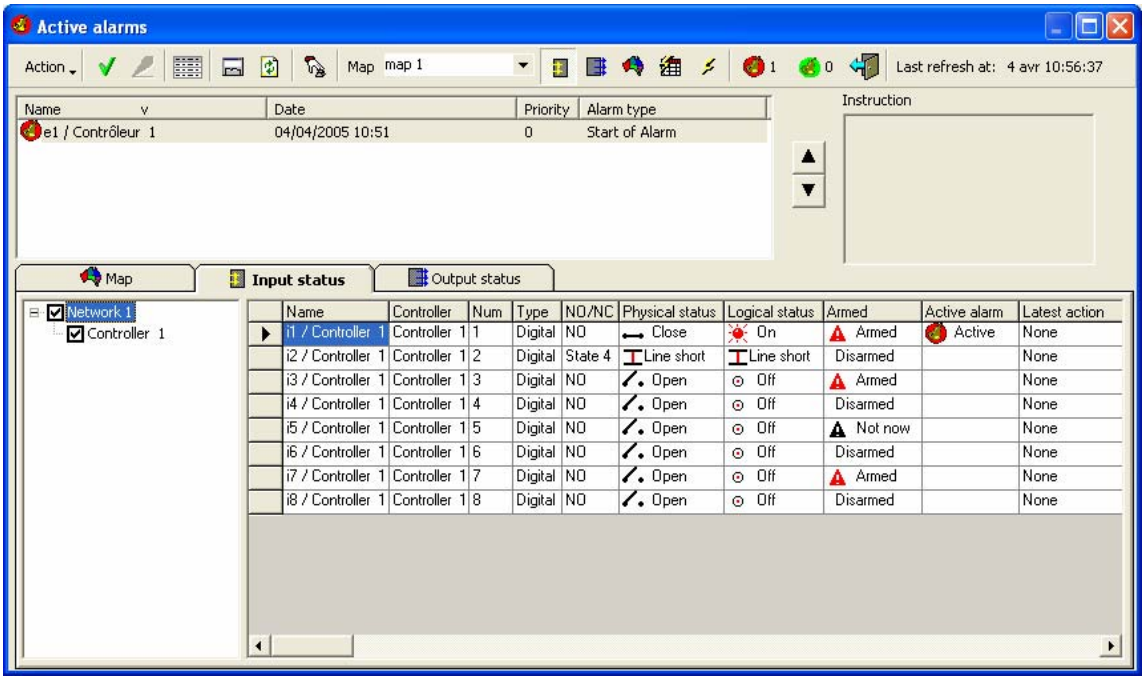

Active alarms
Action
Map map 1
Last refresh at: 4 avr 10:56:37
Name
Date
Priority
Alarm type
e1 / Contrôleur 1
04/04/2005 10:51
0
Start of Alarm
Instruction
Map
Input status
Output status
Network 1
Controller 1
Name
Controller
Num
Type
NO/NC
Physical status
Logical status
Armed
Active alarm
Latest action
i1 / Controller 1 | Controller 1 | 1 | Digital | NO | Close | On | Armed | Active | None
i2 / Controller 1 | Controller 1 | 2 | Digital | State 4 | Line short | Line short | Disarmed | | None
i3 / Controller 1 | Controller 1 | 3 | Digital | NO | Open | Off | Armed | | None
i4 / Controller 1 | Controller 1 | 4 | Digital | NO | Open | Off | Disarmed | | None
i5 / Controller 1 | Controller 1 | 5 | Digital | NO | Open | Off | Not now | | None
i6 / Controller 1 | Controller 1 | 6 | Digital | NO | Open | Off | Disarmed | | None
i7 / Controller 1 | Controller 1 | 7 | Digital | NO | Open | Off | Armed | | None
i8 / Controller 1 | Controller 1 | 8 | Digital | NO | Open | Off | Disarmed | | None

Table analysis

Controllers list: Select the required controllers. Inactive controllers are represented in grey

Name: Input name

Controller: Controller name that the input belongs to

Num: Input number in the controller.

Type: Mention if the input type is Digital, Digital 4 states or Analog.

NO/NC: Input normal status, i.e. normally open (NO), normally closed (NC) or State 1 to 4.

Physical status: Open, Close, Line short or Line cut. During reading time or communication problems with the controller, a '?' mark is displayed to show that the status is unknown.

Logical status: On, Off, Line short or Line cut (or '?' if the status is unknown).

Armed: The arm status switches between:

- **(Red icon) Armed**: The current time falls within the activation boundaries of the input weekly program ('green' periods').
- **(Black icon) Not now**: The current time falls outside the activation boundaries of the input weekly program ('red' periods).
- **Disarmed**: The input is not included within the Event Handling Program.

The system automatically goes from "Not now" to "Armed", and vice versa, according to time zones.

Active alarm: Coloured icons signal the alarm status (active, acknowledge and confirmed) in the table as well as in the tool bar

- **(Red icon) Active**: Active alarm
- **(Green icon) Acknowledge**: Acknowledge alarm
- **No icon**: Not in alarm or alarm confirmed

Latest action: Shows if the normal situation has not temporarily been affected manually or by the activation of an action, a process or a global reflex.

Tips & Notes

Manual action

Point the mouse on an input name, click on the right button and choose among the following functions:

- Acknowledge (when under alarm)
- Confirm (when under alarm)
- Open input properties
- Return to normal mode
- Input deactivation

Sorting out information

The information in the table can be sorted out. Each column can serve as a sorting criterion. To organize information in an increasing order, click on the column header. To sort the information in a decreasing order, click again on the column header.

Alarm prevention

To prevent the alarm apparition, resulting from input activation, choose one of the following methods:

- Delete the input from the input list (in "Controller - Input" screen).
- In the "Event-Handling Program - Alarms" screen, select **X** to exclude the input from the event-handling program.
- In the "Event-Handling Program - Alarms" screen, attribute the "WP Never" weekly program to the input.
- From the "Active Alarms - Map" screen or from the "Active Alarms - Input Status" screen, right click on the input and select 'Input deactivation'.

Example

How to set an alarm that would be active only at night:

The opening of a door must raise an alarm during the night (arming period) but not during the day (disarming period).

Perform as follows:

- In the "Controller - Input" screen, define the input to which the sensor that checks the door opening is connected.
- Define the arming period, in other words, the daily and weekly programs, which are activated at night and inactivated during the day (in the "Parameter - Daily Program" and "Parameter - Weekly Program" screen)
- In the "Event-Handling - Alarms" screen, select **V** to include the input in the event-handling program, and select the required Weekly program.
- If necessary, position the corresponding icon in a map.

During the night, the alarm will be activated if the door is opened. During the day, the input is disarmed by its weekly program and will not trigger an alarm.

Note: The "WP Always" weekly program permits to arm incessantly an input; the "WP Never" weekly program never arms an input. An input must be armed for its activation triggers an alarm in the "Active Alarms" screen.

4.11.4. Active Alarms - Output Status

This table displays the output status, in real time. It is also accessible from the "Manual Action - Relays control" screen.

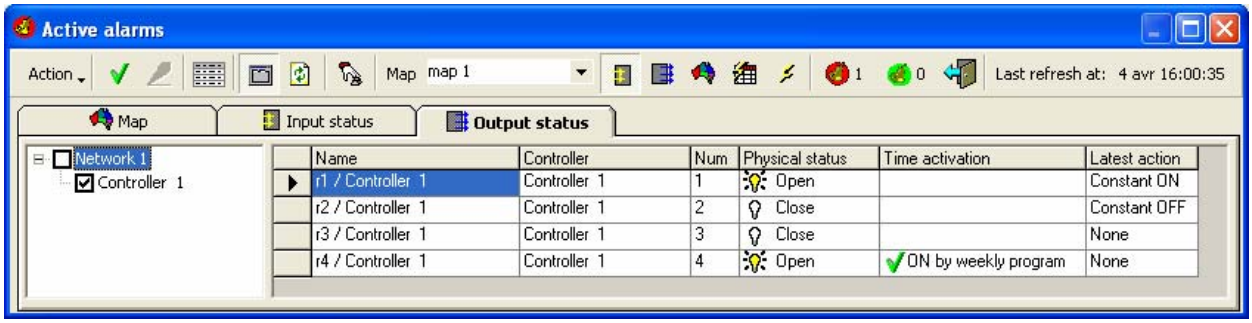

Active alarms
Action
Map map 1
Last refresh at: 4 avr 16:00:35
Map
Input status
Output status
Network 1
Controller 1
Name | Controller | Num | Physical status | Time activation | Latest action
r1 / Controller 1 | Controller 1 | 1 | Open | | Constant ON
r2 / Controller 1 | Controller 1 | 2 | Close | | Constant OFF
r3 / Controller 1 | Controller 1 | 3 | Close | | None
r4 / Controller 1 | Controller 1 | 4 | Open | ON by weekly program | None

Table analysis

Controllers list: Select the required controllers. Inactive controllers are represented in grey

Name: Relay name

Controller: Controller name that the relay belongs to

Num: Output number in the controller.

Physical status: Open or Close. During reading time or communication problems with the controller, a '**?**' mark is displayed to show that the status is unknown.

Time activation: This column shows if a Weekly Program has been attributed to the relay:

- V **ON by weekly program**: The relay is activated because a weekly program has been attributed and the current time falls within the activation boundaries of the weekly program ('green' periods'). The relay is automatically activated according to time zones.
- X **OFF by weekly program**: The relay is deactivated because a weekly program has been attributed and the current time falls outside the activation boundaries of the weekly program ('red periods'). The relay is automatically released according to time zones.
- **No text**: No weekly program has been attributed to the relay.

Note: The "WP Always" weekly program permits to trigger incessantly a relay while the "WP Never" weekly program ensues in a constant deactivation.

Latest action: Shows if the normal situation has not temporarily been affected manually or by the activation of an action, a process or a global reflex.

Tips & Notes

Manual action

Point the mouse on an output name, click on the right button and choose among the following functions:

- Open relays properties
- Return to normal mode: To cancel all actions described below.
- Deactivate relay continuously (Constant OFF): To close a door permanently for example
- Activate relay continuously (Constant ON): To open a door permanently for example
- Activate relay during: To switch on / off an indication light, during a defined delay for example. Specify the number of seconds (between 1 to 120 sec.).

Sorting out information

The information in the table can be sorted out. Each column can serve as a sorting criterion. To organize information in an increasing order, click on the column header. To sort the information in a decreasing order, click again on the column header.

5. “Modules” MENU

PRONET PLUS, according to the plug used, may contain several modules which are described in this chapter (the plug description, and therefore the installed modules, can be displayed in the “Help - About PRONET PLUS” screen).

5.1. Parking Module

5.1.1. Parking Module - Basic Concepts

The parking module allows for access control to parking lots and for management of parking zone fill-up, according to user groups.

The system ability to manage the parking activity is based on three concepts:

- **Parking lot**: Physical area where cars are parked, controlled by one or several access points (card readers). PRONET PLUS may manage one or more parking lots.
- **Parking users group**: Any company or entity that rents or owns parking spaces. Each cardholder of this company may belong to a parking users group.
- **Parking zone**: A certain number of spaces allocated to a parking user group in a specific parking lot. A defined parking zone will be only accessible by the corresponding parking users group.

For each parking zone, two types of information are available:

- A counter displaying the amount of available spaces at any time in the zone,
- A list of access points used to enter in the parking zone. For each access point, the counter may increment (+1), decrement (-1) or remain unchanged after a badge has been swiped.

A cardholder may access a parking lot only if his parking users group has a parking zone in this requested parking lot, and this parking zone is not full.

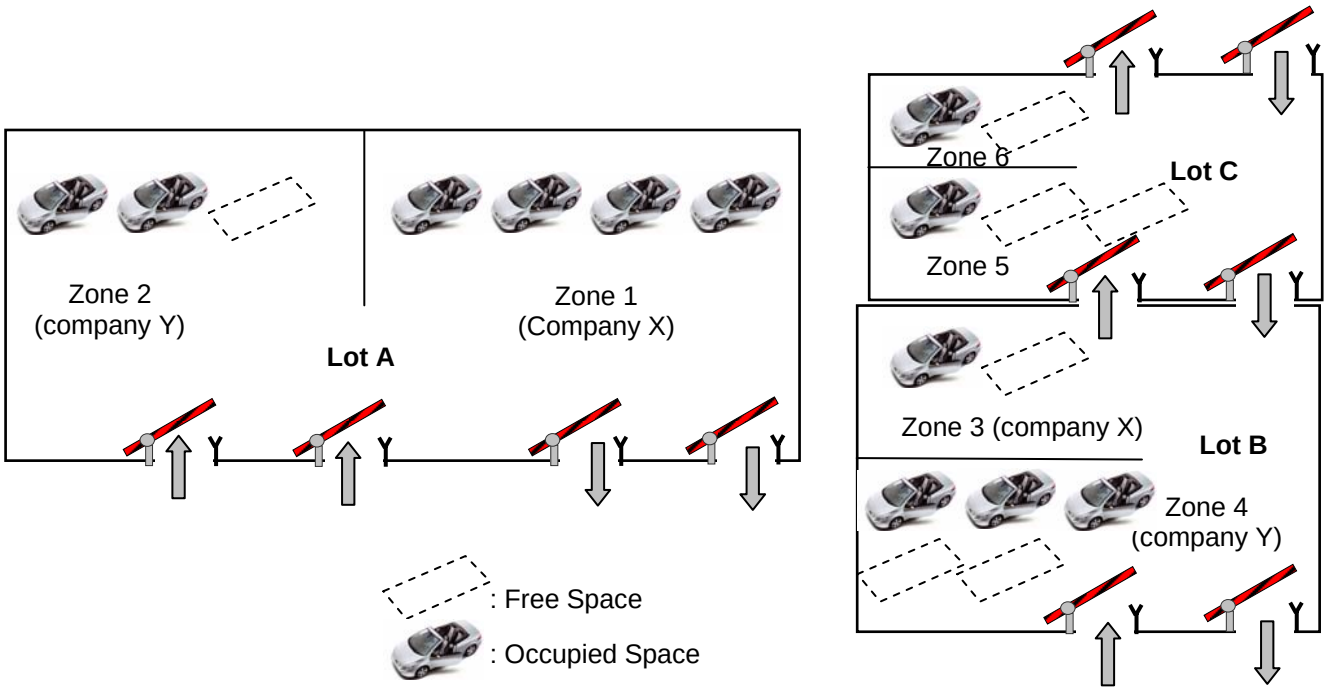


Fig. 5.1 : Example of parking architecture.

Example

The previous diagram (Fig. 5.1) illustrates the map of a building car park. The Company X and the Company Y rent parking spaces in this building:

-The **Company X** rents **4** parking spaces in the **Lot A** and **2** parking spaces in the **Lot B**.

-The **Company Y** rents **3** parking spaces in the **Lot A** and **5** parking spaces in the **Lot B**.

To implement this requirement, it is necessary to create the following items:

- Two parking lots: **Lot A** and **Lot B**
- Two parking users groups: **Company X** and **Company Y**
- Four parking zones:
  - Zone 1 (**4** spaces): **Company X** in **Lot A**
  - Zone 2 (**3** spaces): **Company Y** in **Lot A**
  - Zone 3 (**2** spaces): **Company X** in **Lot B**
  - Zone 4 (**5** spaces): **Company Y** in **Lot B**

All the cardholders of a user group are interdependent. Access to members of a user group is contingent to the space available in the zone allocated to the group. If five employees of Company X arrive at the same time in parking lot A, access will be granted to the first four cars and denied to the other cars of the group.

Access permissions to a parking lot are independent of authorizations to other parking lots. An access denial in Lot A does not prevent access in Lot B.

If all the parking spaces of a company are occupied, other cars of this company will be denied access. Nevertheless other cars from other companies could still reach their respective zones in the same parking lot according to their own occupancy rate.

Operating Mode

- In the "Modules - Parking Lot - General" screen, create parking **Lot A** and **Lot B**.
- In the "Controller - General" screen, create two controllers as 'parking' and allocate to one the parking **Lot A** and to the other, the parking **Lot B**.
- In the "Modules - Parking Users Group - General" screen, create two user groups, **Company X** and **Company Y**.
- Allocate each member to his user group, by selecting from the "Parking user group" list from the "All Cardholders - Personal" screen.
- In the "Modules - Parking Zone - General" screen, create the 4 parking zones, by defining the parking user group, the parking lot and the maximal number of places.
- The "Modules - Parking Zone - Access" screen gives a list of the relevant readers. For each parking zone, indicate which reader is used for entrance in the zone, for exit the zone or is 'neutral', i.e. not used for this zone (it not modifies the places number). Specify whether it should allow/deny access when the zone is full (for example, if it is used for exit, exit must be granted when the zone is full).

Managing space availability

A free space counter is linked to each parking zone. The movement of vehicles affects the counter level. For each car that enters, the amount of space is reduced. Each time a car goes out, the counter is incremented by one unit.

The number of space available can be computed at any time with respect to maximal parking capacity and counter status. A zone is full when the free spaces counter indicates zero.

5.1.2. Parking Lot

The parking lot is an area where cars are parked. Many parking lots can be supervised simultaneously.

This menu is divided into two tabs:

- General tab: Define parking lots
- Presence list tab: Follow up on all vehicle movements, within each parking lot, according to user groups

5.1.2.1. Parking Lot - General

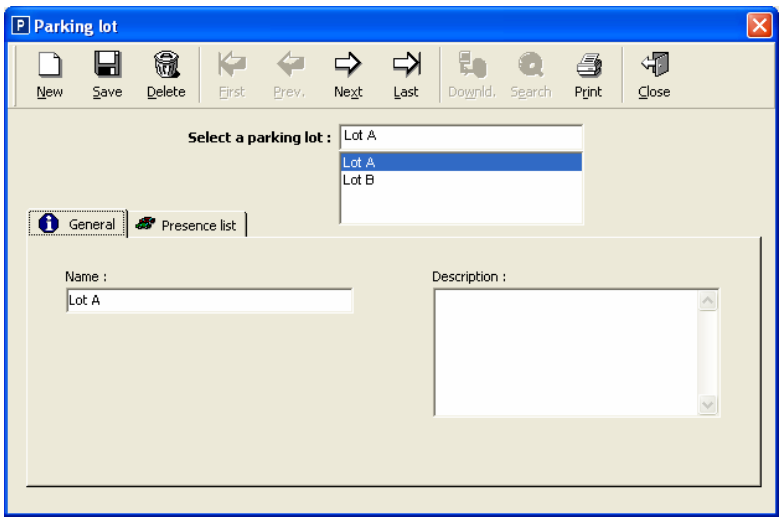
This screen defines the different parking lots supervised by the system.

Fields

Name: Name the different lots

Description: Describe the new data entry

Note: After creating the different parking lots, it is necessary to define controllers as 'parking', in the "Controller - General" screen, and allocate the new parking lots to them.



5.1.2.2. Parking Lot - Presence List

This screen allows the monitoring of vehicle movements within each parking lot. This information, which is displayed automatically, can be manually modified in the "Modules - Parking Zone - Presence update" screen.

Data displayed

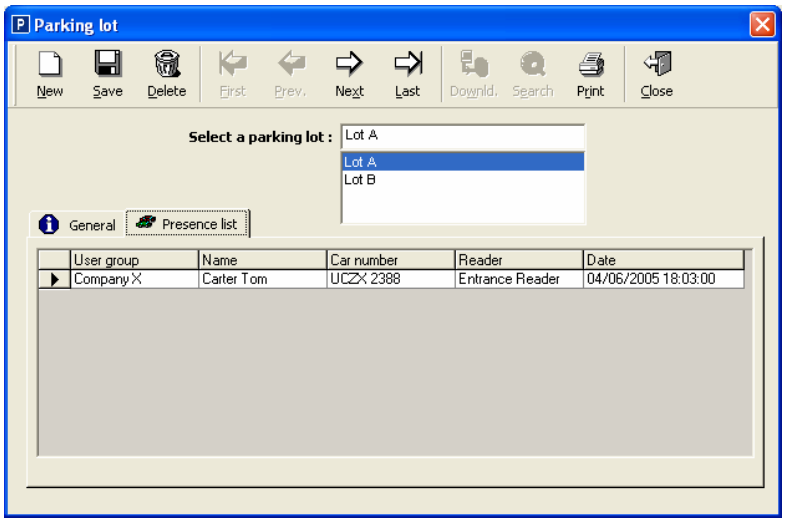
User group: Company or group to whom the vehicle belongs

Name: Name of the cardholder requesting access

Car number: Car license number

Reader: Reader recording access to parking

Date: Transaction date



5.1.3. Parking Users Group

A parking user groups is any company, or other body, leasing or owning parking spaces. Each group is allocated a specific parking zone, which can be identified by an identity number.

All group members are interdependent. Each group member has access to all the lots allocated to his company. If the lot allocated to his group is full, access will be refused to all the members of that group.

This menu is divided into two tabs:

- General tab: Define user groups
- Presence list tab: Monitor car movements within each parking lot

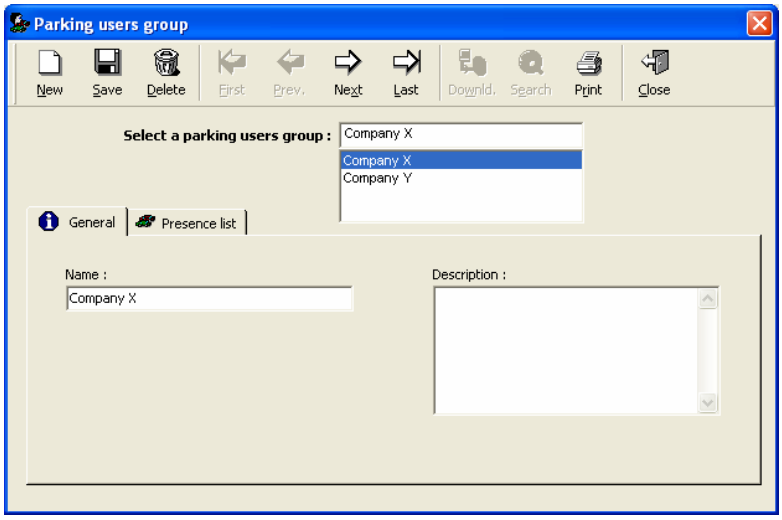
5.1.3.1. Parking Users Group - General

This screen defines the different user groups supervised by the system.

Fields

Name: Name the different user groups

Description: Describe the new data entry



5.1.3.2. Parking Users Group - Presence List

This screen displays details about the cars parked and their movements, according to user groups. This information, which is displayed automatically, can be manually modified in the "Modules - Parking Zone - Presence update" screen.

Data displayed

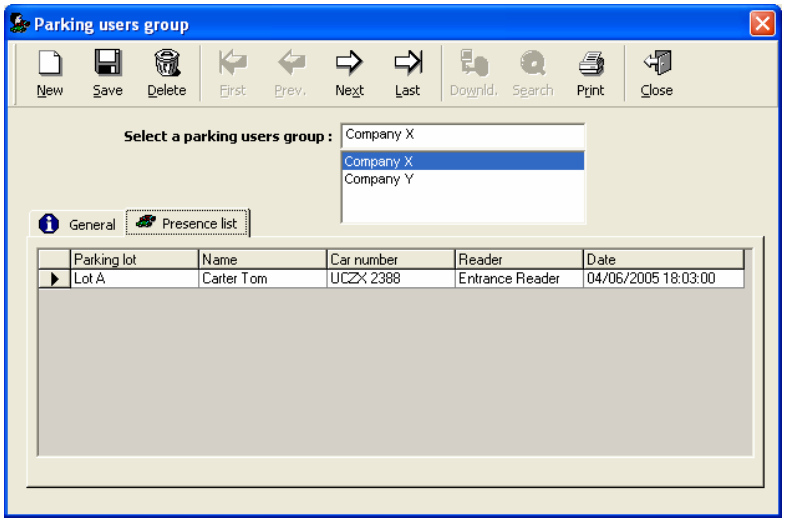
Parking lot: Lot name

Name: Name of the cardholder requesting access

Car number: Car license number

Reader: Reader recording access to parking

Date: Transaction date



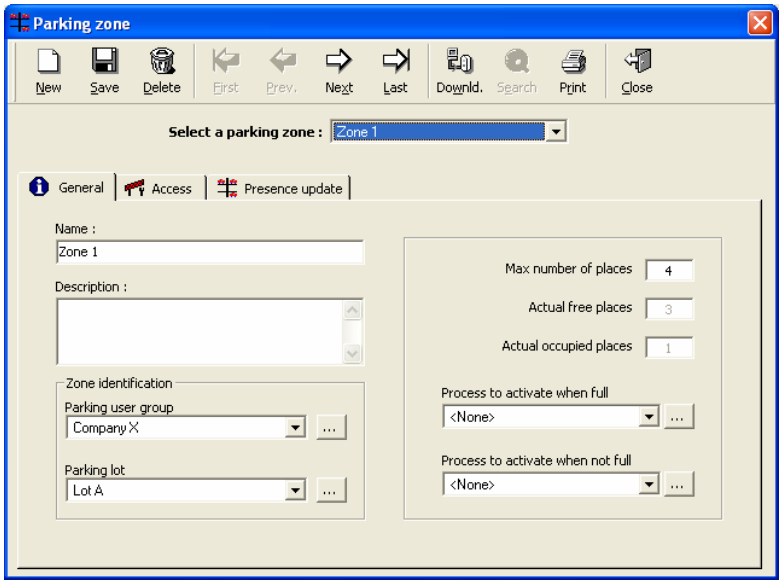
5.1.4. Parking Zone

The members of a user group can only access the parking spaces allocated to their group. Access to the parking lot is granted insofar as there are spaces available in the zone allocated to a group of users to which the driver belongs.

This menu is divided into three tabs:

- General tab: for parking zone definition
- Access tab: for access management
- Presence update tab: for modification of database information

5.1.4.1. Parking Zone - General



Fields

Name: Name the parking zone

Description: Describe the new data entry

Zone identification:

Parking user group: Select the group that rents or owns parking spaces or press on the **[…] button** to create a new group.

Parking lot: Select the parking lot for which a filling up list has been established, or press on the **[…] button** to create a new parking lot.

Max number of places: Enter the parking zone maximal capacity

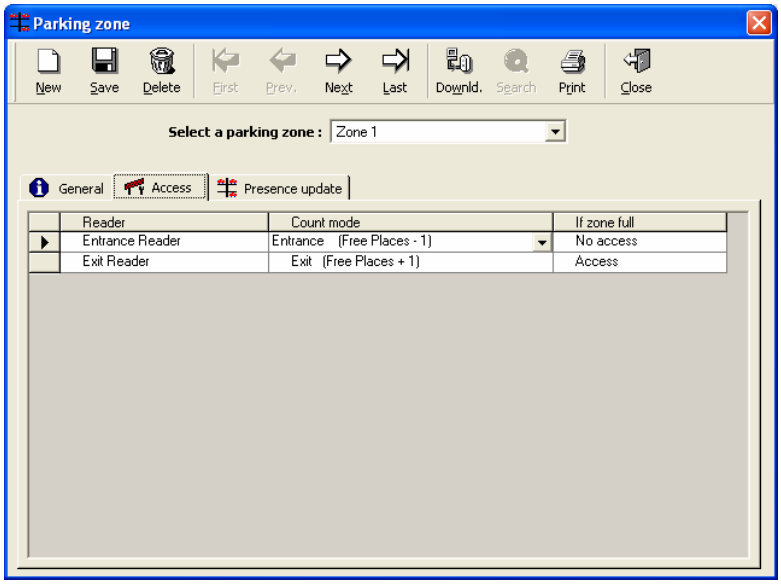
Actual free places: Automatically displayed

Actual occupied places: Automatically displayed

Process to activate when full: Define the process to trigger if the parking lot is full (example: lighting of a red light); choose from the list or press the **[…] button** to create a new process.

Process to activate when not full: Define the process to trigger if the parking lot is not full (example: lighting of a green light and opening of a gate); choose from the list or press on the **[…] button** to create a new process.

5.1.4.2. Parking Zone - Access



Fields

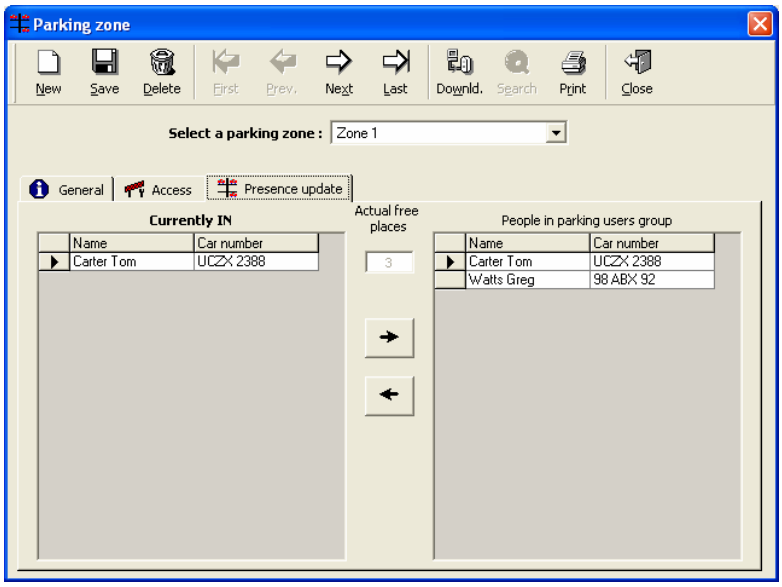
Reader: List of the relevant readers

Count mode: For the parking zone, indicate which reader is used for entrance in the zone, for exit the zone or is 'neutral', i.e. not used for this zone (it not modifies the places number).

If zone full: Specify whether the reader should allow/deny access when the zone is full (for example, if it is used for exit, exit must be granted when the zone is full).

5.1.4.3. Parking Zone - Presence update

In this screen, the system displays automatically for each parking zone, driver names and car license numbers of cars, which are currently in the parking zone and all members of the current user group. This screen is particularly useful when cars movements are not registered by the system (i.e. because of a power supply failure or a communication failure between readers and controllers). Then, it is possible to modify manually the list of cars, which are currently in the parking zone. This presence list is viewable from the "Parking Lot - Presence List" screen or from the "Parking Users Group - Presence List" screen.



Fields

Currently IN: Cars currently in the parking zone

Name: Driver name

Car number: License plate number of the car

Actual free places: The counter displays the unused capacity of the parking zone, in real time.

Buttons [←] & [→]: Use the horizontal arrows for inserting or deleting a car from the parking zone.

People in parking users group:

Name: Driver name

Car number: License plate number of the car

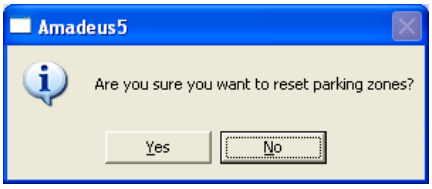
Tips & Notes

Duplicated items

In the list of cars currently in the parking zone, duplicated items can be exist in case of the badge has been swiped twice at the entrance or if the same badge has been used for two cars. To avoid such a situation, the solution consists to define the readers with the (Global, Time or Local) Anti-Passback function.

5.1.5. Reset Parking Zones

This function allows resetting all parking zone counters, i.e. after this action, all parking places will be free. Confirmation of the request is displayed on the screen.



The application provides three ways to reset the parking zone counters:

- Punctually, by choosing the “Reset Parking Zones” menu and by answering “Yes“ to the question,
- Daily, in automatic way, by selecting this option in the “Tools - Options - Server” screen and by specifying the requested time for this operation,
- Automatically, by global reflex, by creating an action with the “Reset parking zones” type and by selecting which parking zone to update. Then, a global reflex may reset a specific parking zone counter by any trigger of the system (by swiping or by changing input status). It may reset the counter at a specific time, by choosing the “Scheduler” as global reflex event type and specifying the date and hour when the parking zone needs resetting (For more details, see the “Event handling - Actions” and “Event handling - Global Reflex” screens).

5.2. Lift Module

5.2.1. Lift Module - Basic Concepts

This function manages access to the floors served by one or several lifts. The floor buttons of a lift are controlled by controller relays. The badge holder swipes his card through a lift reader: according to its authorizations, one or several relays are activated which unlock the corresponding floor buttons so that the badge holder may then press the button of the floor requested.

A lift program defines the floors combination accessible by a group of users. This function does not control access to the lifts, nor to the areas served by these lifts. Lift programs can be identical for all lift readers belonging to the same controller or specific for each reader. The later is especially useful in big installations (a controller may have up to 64 relays). In a building shared by many companies, the lift program allows each person to select only the floors allocated to his company.

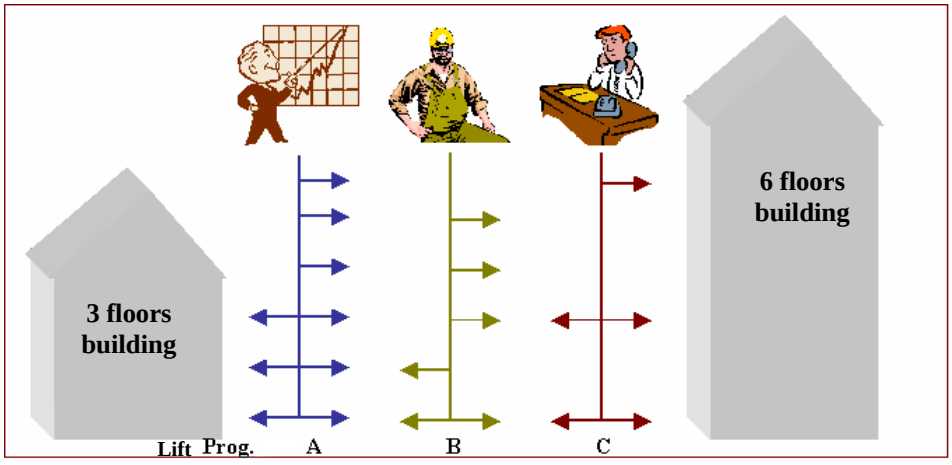
Note: If the badge holder has not selected a floor within a specified delay, access will be denied to all floors. This prevents unauthorized persons from using the lifts.

Example

A site consists on two buildings. The first is made up of three floors and the second is made up of six floors. Each building has its own lift.

Three user groups are defined:

- Top management can access all floors in both buildings
- Technical staff can access floors 1 and 2 of the first building and floors 1, 3, 4 and 5 of the second building
- Administrative people can access floors 1 and 3 of the first building and floors 1, 3 and 6 of the second building



To fill the needs of this site, three lift programs must be created with the following authorizations:

Lift program	User group	Accessible floors Building 1	Accessible floors Building 2
A: Top management	Top management	1, 2, 3	1, 2, 3, 4, 5, 6
B: Technical Division	Technical personnel	1, 2	1, 3, 4, 5
C: Administration	Administrative personnel	1, 3	1, 3, 6

Operating Mode

- In the "Controller - General" screen, create two controllers as 'Lift', one by building.
- In the "Modules - Lift Program - General" screen, create three lift program groups, **Top management**, **Technical Division** and **Administration**, and for each group, allocate outputs to the lifts floor buttons,
- Allocate each member to his lift program group, by selecting from the "Lift program" list from the "All Cardholders - Personal" screen.

Tips & Notes

Maximum Controllers capacity: 64 floors

A basic controller has 4 relays. With a 12-relay extension card plugged in and three 16 relays satellite cards connected to its port 2, the controller may have 64 relays and therefore control 64 floors. Several controllers can supervise different lifts in parallel.

Many lifts

A controller can manage several lifts with identical authorizations (in "Modules - Lift program" screen) or with specific authorizations for each reader (in "Modules - Lift authorization group" screen, when the 'Different lift program for each reader' option is selected in the "Tools - Options - Server" screen that only appears in the server computer).
This feature is required the use of EPROM TPL from 01/03/2003 or later.

Example: a controller has 64 relays available

Reader 1 - Lift 1:	10 relays – 10 floors
Reader 2 - Lift 2:	20 relays – 20 floors
Reader 3 - Lift 3:	30 relays – 30 floors
Reader 4 - Lift 4:	4 relays – 4 floors

Information with respect to the lift program is divided in two screens:

- **Lift program**, where the same relays / lift buttons applies for all readers of a same controller.
- **Lift authorization group**, where specific relays / lift buttons applies per reader. This case is particularly useful for significant sites.

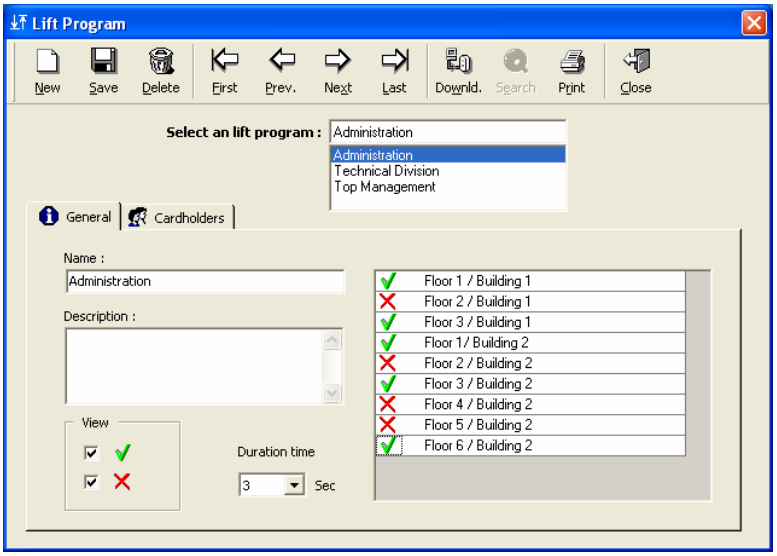
5.2.2. Lift Program

The screen "Modules - Lift Program" is used in the majority of lift applications, where the same relays / lift buttons applies for all readers. It is divided into two tabs:

- General tab: Define lift programs
- Cardholders tab: Refer to the persons belonging to the lift groups

5.2.2.1. Lift Program - General

Lift programs are defined in this screen.



Fields

Name: Name the new lift program

Description: Describe the new data entry

View:

- Check V button to display the relays included in the lift program
- Check X button to display the relays excluded from the lift program

Duration time (from 0 to 120 seconds): Delay during which the cardholder has to press the floor button after receiving access authorization; it corresponds to the activation delay of the relay which control the floor button selection. By default, a delay of 3 seconds is set.

Note: Alternated mode (Duration time set to 122 Sec): The relay is activated (i.e. the floor button is available) after the first valid swipe and stays activated; the relay is only deactivated after a valid second badge reading and stays deactivated, and so on.

Table: Relays list of the defined lift type controllers

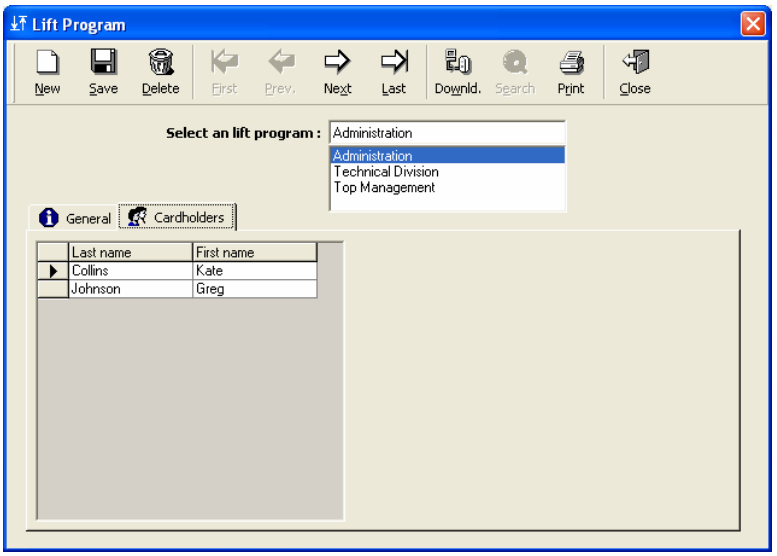
- Select V to include the relay in the lift program
- Select X to exclude the relay from the lift program

By default, the relays - and thus the corresponding floors - are excluded from the program.

5.2.2.2. Lift Program - Cardholders

The informative table displays the names and surnames of the member the user group to which the lift program is related. This is not a presence list.

This tab disappears when the 'Different lift program for each reader' option is selected in the "Tools - Options - Server" screen.



5.2.3. Lift Authorization Group

This screen appears when the 'Different lift program for each reader' option is selected in the "Tools - Options - Server" screen. It is used in the lift applications, where specific relays / lift buttons applies per reader. It is divided into two tabs:

- General tab: Define lift authorization groups
- Cardholders tab: Refer to the member the user group to which the lift authorization group is related

5.2.3.1. Lift Authorization Group - General

Lift authorization groups are defined in this screen.

Fields

Name: Name the new lift authorization group

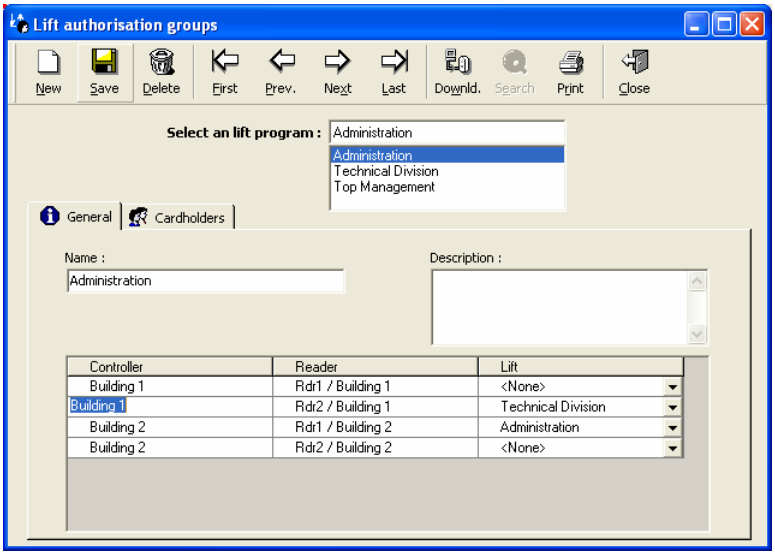
Description: Describe the new item

Table:

Controller: The list of the controllers associated to the lift

Reader: The list of the readers associated to the lift

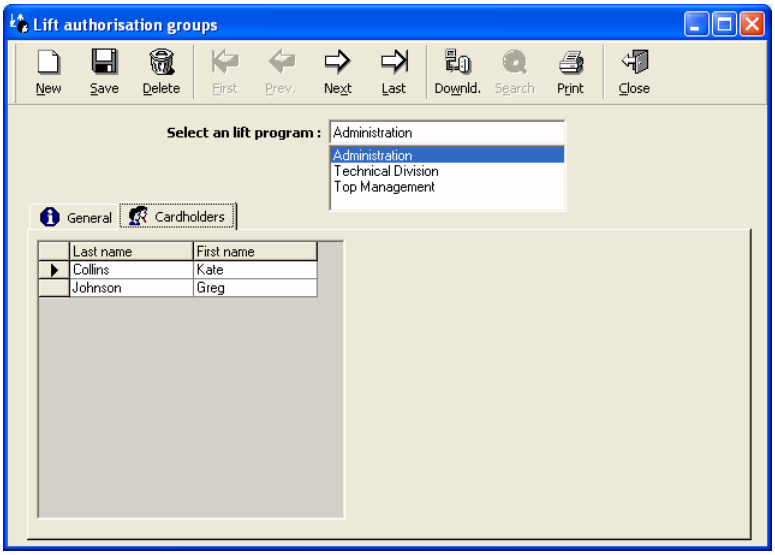
Lift: Select a Lift Program from the list.



5.2.3.2. Lift Authorization Group - Cardholders

The informative table displays the names and surnames of the member the user group to which the lift authorization group is related. This is not a presence list.

This tab appears when the 'Different lift program for each reader' option is selected in the "Tools - Options - Server" screen.

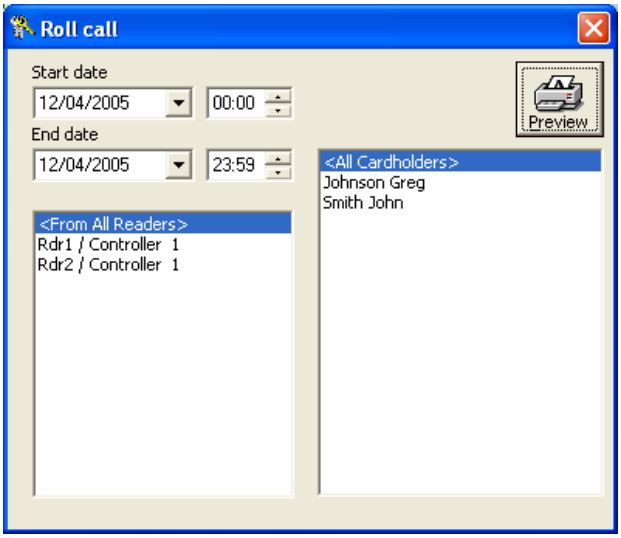


5.3. Time & Attendance Management Module

5.3.1. Roll Call

This screen allows the time & attendance management. It facilitates the computation of employees' attendance, to provide the number of hours worked by employees.

It is a very basic calculation, which only takes into account the first and last access of a cardholder at pre-defined readers. The calculation can be restricted to specific periods.



Fields

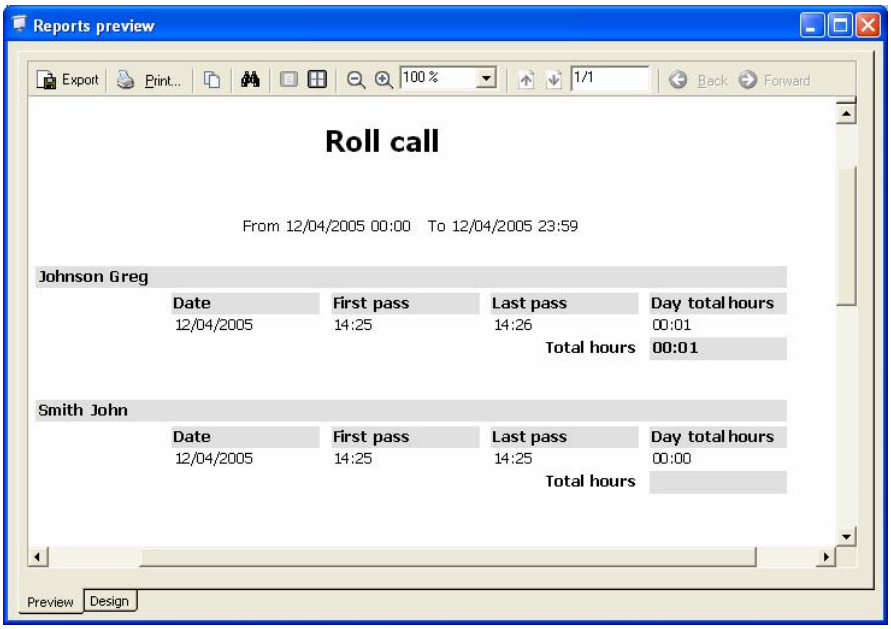
Start date: Specify the date and hour of the beginning of the period

End date: Specify the date and hour of the end of the period

Left window: Select the reader(s) to take into account

Right window: Select the cardholders(s) to take into account

Preview: Preview the roll call report



5.4. Guard Patrol Module

5.4.1. Guard Patrol Module - Basic Concepts

A guard patrol consists of a path of checkpoints reached by an authorized employee - the guard - within predefined deadlines. Arrival at a checkpoint is signalled via input activation or reading of a badge and results in a message sent to the PC. Each expected time allows for tolerance deadlines. Several tours can be defined and run in parallel. The log and the reports will show them.

Example

8:00 Guard tour beginning

8:06 - 8:15 Predefined authorized arrival period at the first checkpoint, the guard should activate an input to signal his passage
(expected time: 8:10, tolerance (-):04 min, (+): 05 min)

5.4.2. Guard

A guard is an employee habilitated to perform guard tours. An employee is defined as a guard in one of the two following screens:

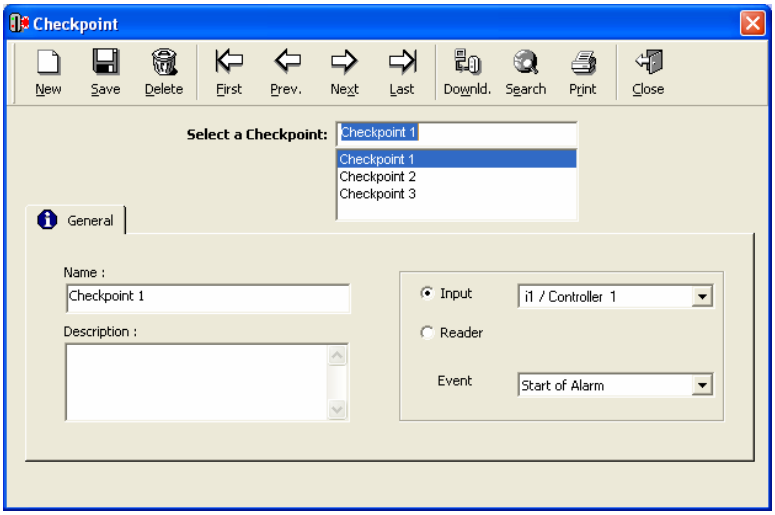
- "All cardholders - General" screen, by manually setting his type to "Guard"
- "Guard", in which the type is automatically set to "Guard".

5.4.3. Checkpoint - General

Checkpoints, as well as the inputs or readers that are used to confirm the arrival, are defined in this screen.

Note: The identity of the person changing the input status is not known by the system. If the security level requests the guard identity verification, readers should be installed at each checkpoint.

Fields



Name: Name the checkpoint

Description: Describe the new data entry

Input: Select the input that signals the arrival of the guard among the list of system inputs; it must be armed (through its Weekly Program) before the start of the tour.

Reader: Select the reader that will signal the arrival of the guard among the list of system readers.

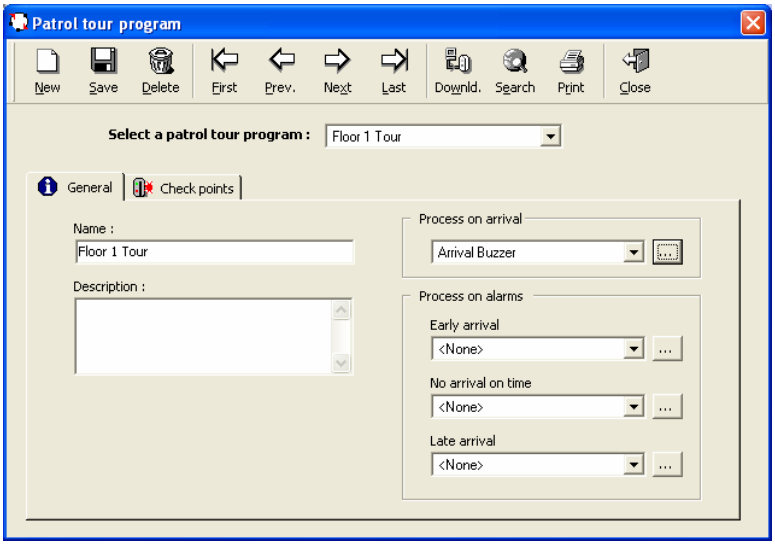
Event: Choose event in the list

- Start of alarm (if input)
- Access granted (if reader)
- Access granted (duress code) (if reader)
- Access denied (if reader)
- Access denied (unsuccessful attempts) (if reader)
  Example of access denied: The guard must pass in front of the computer room but is not allowed entering it.

5.4.4. Guard Tour Program

5.4.4.1. Guard Tour Program - General

This screen allows the guard tours definition. Select the processes to activate following the arrival of the guard at the checkpoint. Processes on alarms can be activated according to early or late arrival or the lack of it.



Fields

Name: Name the new tour

Description: Describe the new item

Process on arrival: Select the process to trigger on arrival in the list or press on the **[…] button** to define a new one.
Examples: Voice alarm on PC, relay activation triggering a buzzer, etc.

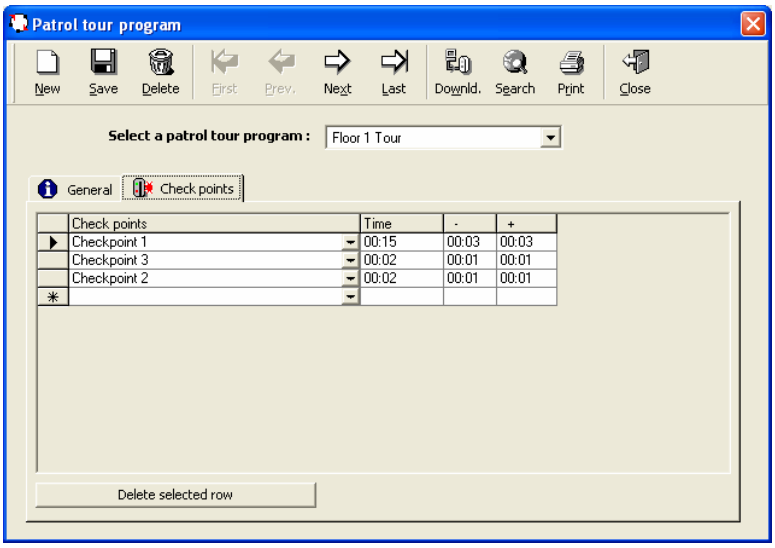
Process on alarms: In the lists, select the process to trigger or press on the **[…] button** to define a new one, in case of:

- **Early arrival**: Arrival before the expected time minus its allowance.
- **Not arrival**: Automatic message displayed at the end of the expected arrival deadline (including the allowance and a further 60 seconds) if arrival has not been signalled.
- **Late arrival**: Arrival after the expected arrival time (including the allowance and a further 60 seconds).

5.4.4.2. Guard Tour Program - Checkpoints

To complete the definition of the guard tour, this screen defines for each checkpoint the arrival time, including allowance for early (-) and late (+) arrival. The arrival times are computed from the beginning of the tour. They are independent of the actual time the tour begins - unknown at this state - and of previous checkpoints time.

Note: Some computers will display the time as "0::00" instead of "00:00". This does not affect the operation.



Fields

Checkpoints: Select the checkpoints of the tour path.

Time: Specify the arrival time, in relation to the beginning of the tour and expressed in a "hh : mm" format

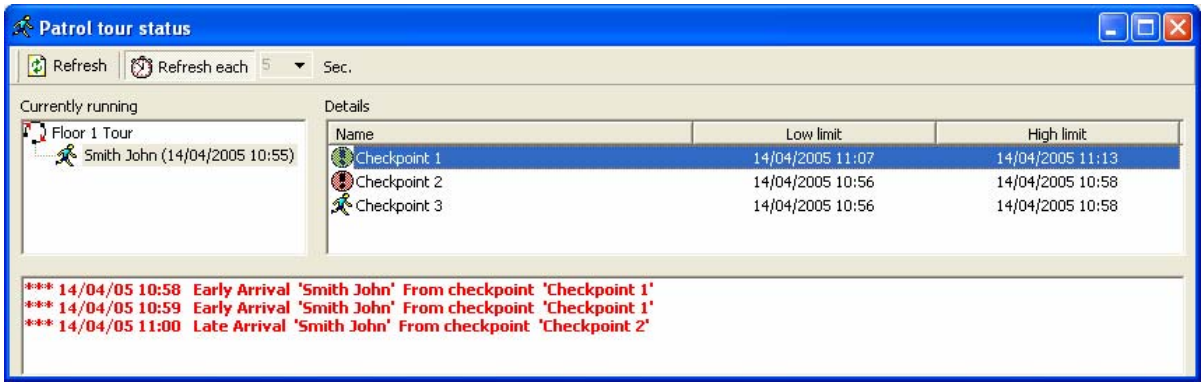
[–]: Tolerance for early arrival

[+]: Tolerance for late arrival

Delete selected row: Point on one of the checkpoint rows and press this button to delete it.

5.4.5. Guard Tour Status

This screen displays the current guard tours, with their details (checkpoints list, expected times of arrival with tolerance limits and arrival status) in real time.



Data displayed

Refresh: Click on this button to update manually the guard tour information.

Refresh each: Click on this button to update automatically the guard tour information. Define the refresh delay in **Sec.** before.

Currently running: List of the current guard tours with mention of the guard, which patrols and with the date and time of the beginning of the tour. By selecting a guard, the right window displays the selected guard tour details.

Details: Information concerning the guard tour selected in the left window, including checkpoints name with its upper and lower time limit of arrival time. Different icons are showing the type of arrival at each checkpoint:

- : Not arrived yet
- : Arrival (on time)
- : Early arrival
- : Late arrival
- : No arrival on time (inside the limit of time)

Bottom window: Log restricted to the selected guard tour.

Note: In addition to this screen, when a guard arrives at a checkpoint (by activating an input or by presenting a card to a checkpoint reader) two messages are displayed in the main log:

- Message of activated input or badge reading event,
- Message of guard tour events (arrival on time, late arrival, etc.)

Example

A guard tour has the following check point: **Time**: 00:10 **[–]**: 00:04 **[+]**: 00:05

8:00	**Guard Tour start-up**: The guard starts the tour Arrival time: 8h10 (–4 min / +5 min)
8:00 - 8:06	**Early arrival**: Arrival before the lower limit of the expected arrival period
8:06 - 8:15	**Arrival on time**: Arrival within expected arrival period
8:16	**No arrival on time**: If the guard has not shown up at the checkpoint at the upper limit of the expected arrival period
8:16 - 8:31	**Late arrival**: Arrival at the checkpoint after the expected time (+60 sec. for system synchronization)
8:31	**End of tour**: 15 min after the last checkpoint expected time, plus the tolerance for late arrival (plus 60 sec. for system synchronization).

5.4.5.1. Beginning a Guard Tour

The application provides two ways to launch a guard tour:

- Punctually, by executing a launching process:
  In the "Event handling - Actions" screen, create an action with the type "Start a guard tour", by specifying the corresponding guard tour program and the guard name.
  In the "Event handling - Process" screen, create a process including this action.
  Launch the process via the "Manual action - Execute Process" screen.
- Automatically, by global reflex, after defining a tour process as explained above. Then create in the "Event handling - Global Reflex" screen, a global reflex, which will launch the tour process by any trigger of the system (by swiping or by changing input status). The guard tour may be launched at a specific time and date, by choosing the "Scheduler" as global reflex event type.

Tips & Notes

Scheduler weekly program

A specific weekly program may be allocated to each global reflex. Therefore the guard tour will not be launched at the 'red periods' of the selected weekly program.

Restarting a tour

Restarting a running tour will stop this tour and replace it by a new instance.

5.4.5.2. Ending a Guard Tour

The guard tour ends 15 minutes after the expected arrival time at the last checkpoint. After this delay, the guard tour is removed from the "Guard Tour Status" screen.

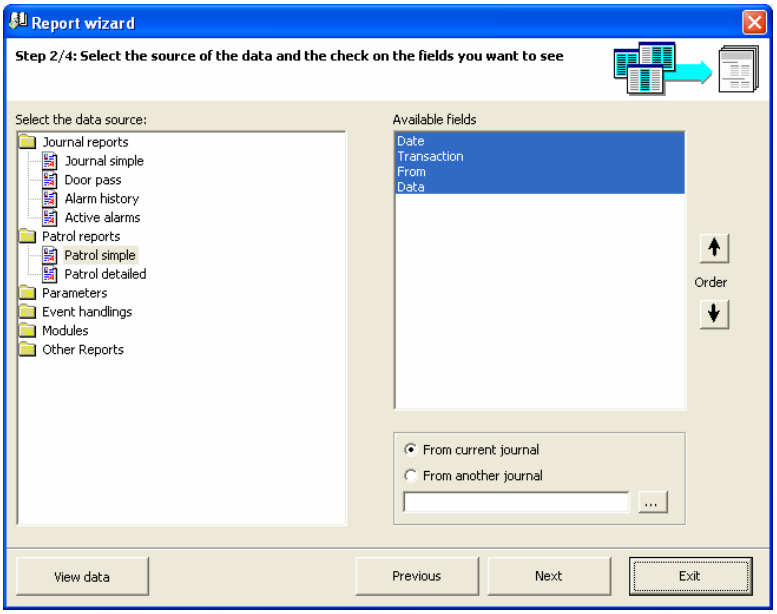
5.4.6. Patrol Report

By opening this screen, the system links directly to the simple patrol report of the report generator.

Two types of patrol reports are available:

- Simple, with the date, transaction, from and data fields.
- Detailed, with the date, transaction, reader, name in journal, denied reason, full name, type, badge, number, department, access group and ID fields.

Consult the "Report wizard" section for further explanations.



5.5. Video Module

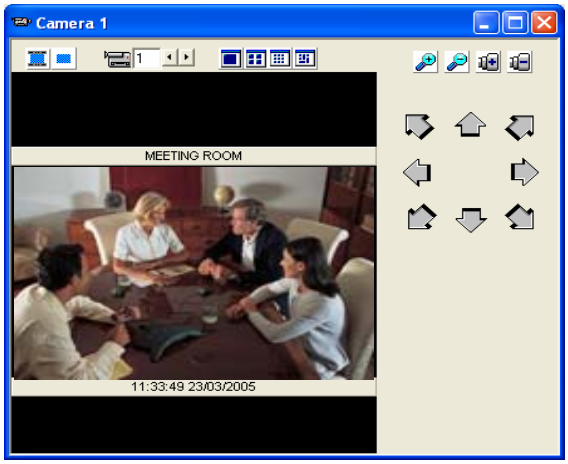
5.5.1. Video Module - Basic Concepts

This module opens the application abilities to the video supervision camera management. It is needed to define the Digital Video Recorder (DVR) with its associated cameras and it is then possible to view live or recorded video from any linked cameras, at any time and on any workstation.

On site maps, clicking on cameras icons displays live image from each camera or records video from each camera. In addition, live video display and video recording may be defined as actions, and as such, may be triggered by a global reflex.

Moreover, a camera can be linked to an event (start of alarm, badge presentation, etc.) and then it is possible to analyze the video records corresponding to this event. These records are accessible at any time in the log display and in the reports.

Note: It is required to use DVR manufactured by Dedicated Micros (Digital Sprite 2 – DS2 and Eco 4). For more information about its products, see www.dedicatedmicros.com.



Examples

- The access of a room is forbidden; it is possible to display automatically live image of the room, as soon as someone tries to enter.
- An object was stolen; the software will allow viewing all video recordings from the relevant camera.

Operating Mode

- In the "DVR" screen, create the different DVR, by defining their IP address, their user name and their password.
- In the "Camera" screen, create all the video cameras, by defining on which DVR they are linked and what is their no. on that DVR. In case of PTZ (Pan/Tilt/Zoom) cameras, select one of the pre-defined positions.

Available functions:

- To display live image from any linked cameras: Create a 'Display live video' action, add it to a process. Activate this process either by:
  - global reflex (after start of alarm, badge presentation, etc.)
  - adding this process in the toolbar
  - adding the action/process icon to the active alarm map, (to enable opening the camera view directly from the "Event-Handling - Active Alarms" screen).

- To record video from any linked cameras: Create a 'Record video' action, add it to a process. It is possible to activate this process in the same way as the previous process.
- To view a history video record from the log: Select a video camera from the camera list of the "Reader" or the "Input" screen in order to link this camera with all events of that reader/input. In the "Tools - Options - Journal / log screen" screen, change the log type into 'Rich log'. Then, in the log display, a 'camera' icon will be displayed near each transaction associated with this reader/input (see also the "Rich Log" paragraph). Each transaction on that reader/input is automatically associated to the corresponding video recording. By right clicking on the events with a camera icon, users can see the corresponding video record.
- To view a history video record using the report wizard: Select a video camera from the camera list of the "Reader" or the "Input" screen in order to link this camera with all events of this reader/input. Then, through the report wizard, click Next, select "Journal Simple" from the list of available reports and click on the "View data". Events from these readers/inputs linked are shown with a camera icon. Right clicking on these events gives an option to view the corresponding video records.

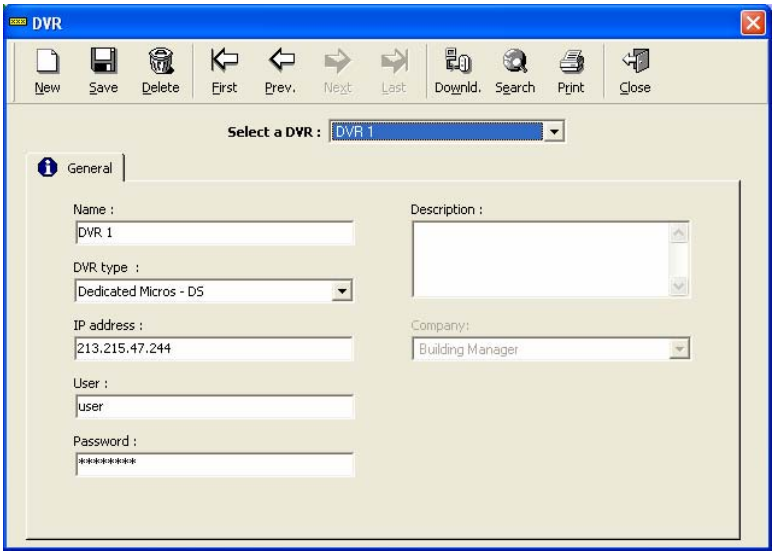
Tips & Notes

Video recording synchronization

Every hour, the application sends the PC time and date to the DVR to allow correct synchronization between video and access components.

5.5.2. Video Module - DVR

This screen allows the different digital video recorders definition.



Fields

Name: Name the new DVR

DVR type: Select the DVR type

IP address: Specify the IP address of the DVR

User: Specify the user name of the DVR

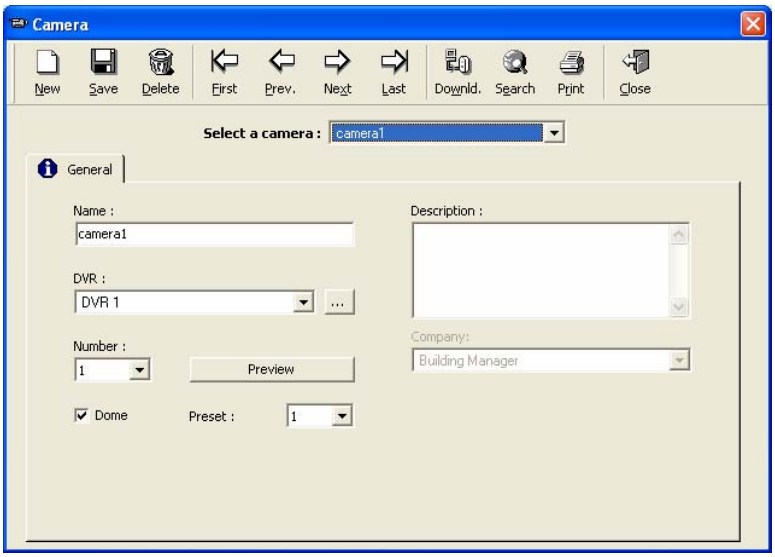
Password: Specify the password of the DVR

Description: Describe the new item

Company: Company the item refers to (for use with multi-company application ONLY).

5.5.3. Video Module - Camera

This screen allows the different video cameras definition.



Fields

Name: Name the new video camera

DVR: Select from the list the DVR on which the video camera is linked or create a new DVR by clicking on the **[…] button**.

Number: Select the camera number on the DVR.

Preview: Click on this button to display the live image from the selected video camera.

Dome: This field enables selecting a preset for PTZ cameras.

Preset: Select the preset for PTZ cameras.

Description: Describe the new item.

Company: Company the item refers to (for use with multi-company application ONLY).

6. “Communication” MENU

6.1. Stop / Resume Polling

Polling allows the transfer to the PC of events (card transactions and alarms) processed by the controllers. Polling consists in interrogating controllers at regular intervals. Detection of events in real time allows for rapid information update and decision making with full knowledge of the facts.

The time interval between two polling transactions is defined in the “Waiting Delay” function in the “Parameter - Controller Network - Definition” screen.

Commands

Resume polling (shift + F8): Select this option to activate the polling

Stop polling (shift + F8): Select this function to stop polling

Tips & Notes

Keyboard Shortcut

Use the “shift F8” key at any time, from any screen, to modify polling status.

Polling at start-up

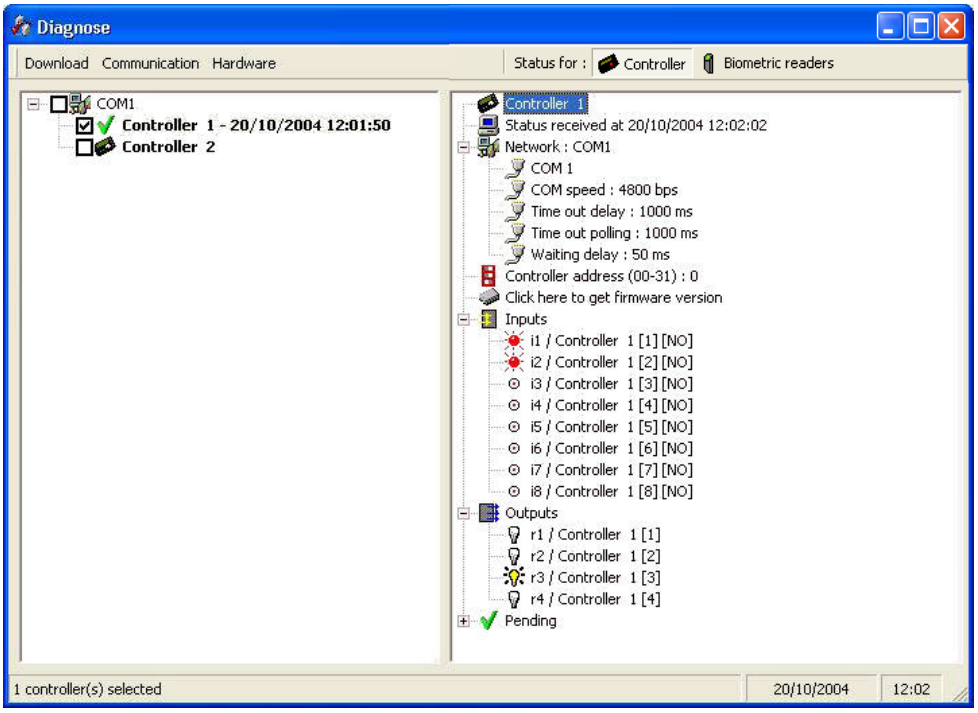
By default, the system carries out a polling activity at the start of the application. This option can be modified in the “Tools - Options - Communication” screen by changing the status of the “Do polling at start-up” function.

6.2. Diagnose

The diagnose screen allows the visualization of the controllers status and the biometric readers status. This screen is made up of two windows:

- **Left window:** Controllers list / biometric readers list
- **Right window:** Information regarding the selected controller or biometric reader

Selecting a controller or biometric reader from the left window activates the right window where the details of the selected controller or biometric reader are displayed.



Menu

Download: Menu of the available downloads for the selected controller or biometric reader

Communication: allows to check the communication with controllers:

- **Check communication (All)**
- **Check communication (selected)**: Select the controller(s) to check (by clicking on the ☐ button next to the controller name)
- **Refresh every**: For automatic checking. Select the controller(s) to check and define the refresh delay in **Sec.**

Hardware: allows to check the inputs/outputs status of the controller displayed in the right window:

- **Refresh status**: Display before the selected controller details in the right window
- **Refresh every**: For automatic checking. Select the controller(s) to check and define the refresh delay in **Sec.**

Status for: Choose the information to display:

- **Controller**: Press this button to display the controllers status
- **Biometric readers**: Press this button to display the biometric readers status:
  From the 'Download' menu it may be possible to initialize one or several biometric readers by re-sending all the database templates after deleting all the fingerprint templates from the reader memory.

Data displayed

Left Window: The controllers / biometric readers list, is sorted by their controller network.

Controller or biometric reader communication status is graphically represented as follows:

- **Grey**: if the controller or the biometric reader is not active, (the communication is not monitored by the system)
- **Bold**: if the controller or the biometric reader is active, (the communication is controlled by the system) in which case, by clicking on the controller or biometric reader name, **V** or **X** icon is displayed next to the name:
  X: absence of communication
  V (with date and hour): communication established; the controller or the biometric reader details are displayed in the right window

Right window: Details of the controller or the biometric reader selected in the left window

Controller or Biometric reader name

Status received at: Date and hour of the event (the controller time when request was put in can differ from time of request if internal controller clock is late)

Network type: Network name, which the selected controller or biometric reader belongs to:

- Port and address of the network: COM, TCP or Modem
- Communication speed (in bauds)
- Time out delay (in milliseconds)
- Time out polling (in milliseconds)
- Waiting delay (in milliseconds)

Controller address (from 00 to 31) **or Biometric reader address**

Controllers specific data:

Click here to get firmware version: The date and the checksum of the firmware (Eprom or Flash) is displayed on the screen; this operation avoids checking physically, if needed.

Inputs: Inputs list with [input number] and [NO or NC definition]. An icon next to the input name specifies the input status (normal status, activated or undetermined) in real time.

Outputs: Outputs list with [relay number]. An icon next to the output name specifies the relay status (activated, deactivated or undetermined) in real time.

Pending: Selected controller commands list and their status. When downloading a non-connected controller, for instance, the information downloaded is signalled by the **V** symbol and the information pending by the **X** symbol.

Biometric readers specific data:

Unit type: Biometric reader type (**1:N** means BioPass, **1:1** means BioProx or BioFlex).

Memory Usage: Appears in X / Y format where:

- X = Used templates
- Y = Maximum templates capacity.

Pending: Some actions related to the biometric readers may be not executed i.e. following to a temporary communication failure. These actions are stored in a buffer as pending commands and are executed later when communication is regained. These are the following actions:

- Delete the entire template of a cardholder
- Delete all templates of a given badge
- Delete all template of a biometric reader
- Delete a specific template
- Download all templates to a specific biometric reader
- Download cardholder templates to all the biometric readers
- Download a single template to all the biometric readers
- Replace an old badge with a new badge

When the **V** symbol is displayed near the title 'Pending', it means that all the fingerprint templates have been received well by the biometric reader.

Tips & Notes

Keyboard Shortcut

Use the "F8" function key at any time, to display the diagnose screen from the software main screen.

6.3. View / Clear Log

The log display is a temporary linear colour display that indicates events as they occur. Information to display in the log (and in the journal) can be customized in the "Tools - Options - Messages" screen. Through that screen an audit of records modifications can be recorded.

Note: Similar information can be recorded in the journal for later reference and printing. Although they appear similar, the contents of the log display and those of the journal are not 100% identical. For example, the user login appears in the journal but not in the log display, by default.

Messages

By default different colours indicate the type of information available:

Burgundy: For signalling unknown badges (not recognized by the system), non-allocated badge (recognized by the system but not allocated) or system alarms, such as weak battery, power up after failure, memory deleted, etc.

Red: For signalling the start and end of input activation

Green: For signalling an access authorization and a normal communication status (OK)

Black: For signalling an access denied and its denied reason

Grey: For signalling system commands, provided for informational purposes. They are not displayed by default.

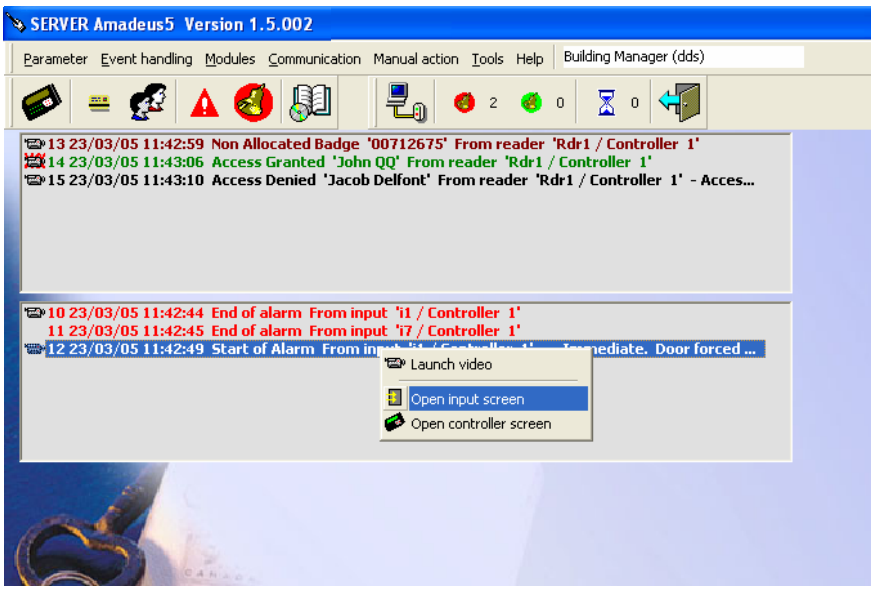
Tips & Notes

Customization of the Log Display

The "Tools - Options - Journal / log screen" screen displays different customization: view/hide log windows at start-up, separate log windows for alarms and access, define a personal log windows size, show system commands for information.

Rich Log

Rich log allows seeing icons linked to events and a context menu. It is available by choosing the 'Rich log' option on the "Tools - Options - Journal / log screen" screen. Its main use is for viewing historical video records directly from the event log.


SERVER Amadeus5 Version 1.5.002
Parameter Event handling Modules Communication Manual action Tools Help Building Manager (dds)
13 23/03/05 11:42:59 Non Allocated Badge '00712675' From reader 'Rdr1 / Controller 1'
14 23/03/05 11:43:06 Access Granted 'John QQ' From reader 'Rdr1 / Controller 1'
15 23/03/05 11:43:10 Access Denied 'Jacob Delfont' From reader 'Rdr1 / Controller 1' - Acces...
10 23/03/05 11:42:44 End of alarm From input 'i1 / Controller 1'
11 23/03/05 11:42:45 End of alarm From input 'i7 / Controller 1'
12 23/03/05 11:42:49 Start of Alarm From
Launch video
Open input screen
Open controller screen

- **Icons**: They are displayed at the left of the log event row

  : A video camera is linked to this event (see the 'Reader' and 'Input' screens).

  : An action « Record video » is linked to this event (see the "Types of actions with parameters" table).

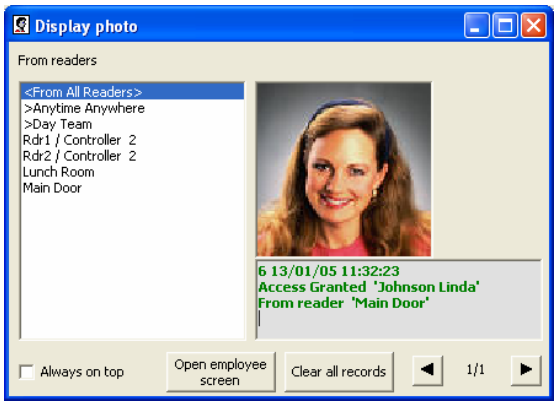
- **Context menu**: By clicking right on some log events, here are the available commands:
  - **Launch video**: Open the history video record linked to the associated event (i.e., event that has one of the above icons). See the "Video Module" chapter.
  - **Open cardholder screen**: Open the associated cardholder screen.
  - **Open reader screen**: Open the associated reader screen.
  - **Open input screen**: Open the associated input screen.
  - **Open controller screen**: Open the associated controller screen.

6.4. Display Photo

This screen displays the cardholder's picture which asks for access at a specific reader. It allows to compare the appearance of the person presenting his badge at a reader to the photograph associated to the badge and stored in the system.

Note: The screen size can be adjusted.

Fields



From readers: Select the reader(s) or the access group(s) for which the identification check is requested

Always on top: Check this box to show this screen even if other screens are opened

Open employee screen: Click on this button to open the current employee screen

Clear all records: Clear the displayed employees list

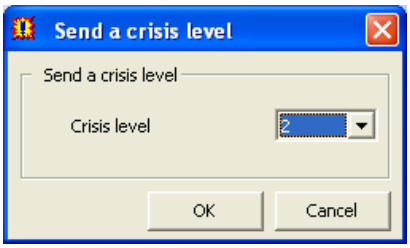
Buttons [◄] & [►]: Click on these buttons to skip from one record to the next

Number/Number: Number of the current employee on the total number of displayed employees

7. “Manual action” MENU

7.1. Crisis Level

The crisis level function enables simple and quick modification of access authorizations for a group of employees. Access denial for all doors could have been achieved through a specific action. However, since this action is connected to an individual, it would have been necessary to repeat this procedure for each employee separately. Downloading access authorization modifications, for a group of 1000 employees at 30 controllers, could have taken up to thirty minutes. The “Crisis Level” function solves this problem. ***This feature is required the use of EPROM dated beyond the year 2000.***



In order for a door to open, the following conditions must be met:

- Badge recognition
- Employee validity
- Access validation through the door
- Employee access time zone compatibility
- Door open time zone compatibility
- Absence of global reflex closing the door relay

When using the ‘Crisis level’ function a further question need asking:
What is the relative value of the door crisis level regarding the general crisis level?

Each access group has on each door, a crisis level to compare with the general crisis level. Following to the general crisis level, defined in the previous screen, access will be granted or denied.

- If the door crisis level is **>** or **=** to the general crisis level:

  ➔ Access is granted

- If the door crisis level is **<** to the general crisis level:

  ➔ Access is denied

- If the door crisis level is on **<Use personal crisis level>**:

  If the **Personal crisis level** of the cardholder is **>** or **=** to the general crisis level:

  ➔ Access is granted

  If the **Personal crisis level** of the cardholder is **<** to the general crisis level:

  ➔ Access is denied

The Personal crisis level is defined in the “All cardholders - General" screen.

By default, the general crisis level is equal to zero and the one for doors depends on the access group, which means that everybody can go through any door. When creating a new access group, by default the crisis level of all doors from the group is null. In order for the system to run optimally all the readers connected to a controller must have an identical crisis level.

Example

A site is composed of three doors: **Entrance Door**, **Office Door** and **R&D Door**.

In a normal situation, all authorized employees can enter at the **Entrance Door**, the engineers are denied access to the **Office Door** and some secretaries can enter at the **R&D Door**.

In case of emergency, even the engineers are denied access to the **R&D Door**.

To do so, create three access groups as follows:

- **Top Management** access group, with the door crisis level **6** (then, with all general crisis level, the members of this group will always have access):

	Reader …	Weekly Program …	Crisis level
V	Entrance Door	WP Always	6
V	Office Door	WP Always	6
V	R&D Door	WP Always	6

- **Administration** access group, with the door crisis level **4** for the **Office Door** and the door crisis level on **<Use personal crisis level>** for the **R&D Door**:

	Reader …	Weekly Program …	Crisis level
V	Entrance Door	WP Always	6
V	Office Door	WP Always	4
V	R&D Door	WP Always	<Use personal crisis level>

- **Engineering** access group, with the door crisis level **3** for the **R&D Door**:

	Reader …	Weekly Program …	Crisis level
V	Entrance Door	WP Always	6
X	Office Door	WP Always	3
V	R&D Door	WP Always	3

In a normal situation, the general crisis level is **1**:

- For the **Office Door**:

- The door crisis level of the **Administration** access group is **4** (> 1) ➔ Access is granted

- For the **R&D Door**:

- The door crisis level of the **Engineering** access group is **3** (> 1) ➔ Access is granted
- For secretaries which have a **Personal crisis level** > or = **1** ➔ Access is granted
- For secretaries which have a **Personal crisis level** = **0** (< 1) ➔ Access is denied

In case of emergency, the general crisis level is changed and increased to **4**:

- For the **Office Door**:

- The door crisis level of the **Administration** access group is **4** (= 4) ➔ Access is granted

- For the **R&D Door**:

- The door crisis level of the **Engineering** access group is **3** (< 4) ➔ Access is denied
- For secretaries which have a **Personal crisis level** > or = **4** ➔ Access is granted
- For secretaries which have a **Personal crisis level** < **4** ➔ Access is denied

Tips & Notes

Last defined crisis level

The last crisis level specified to the system is shown in the “Manual action - Crisis Level“ screen.

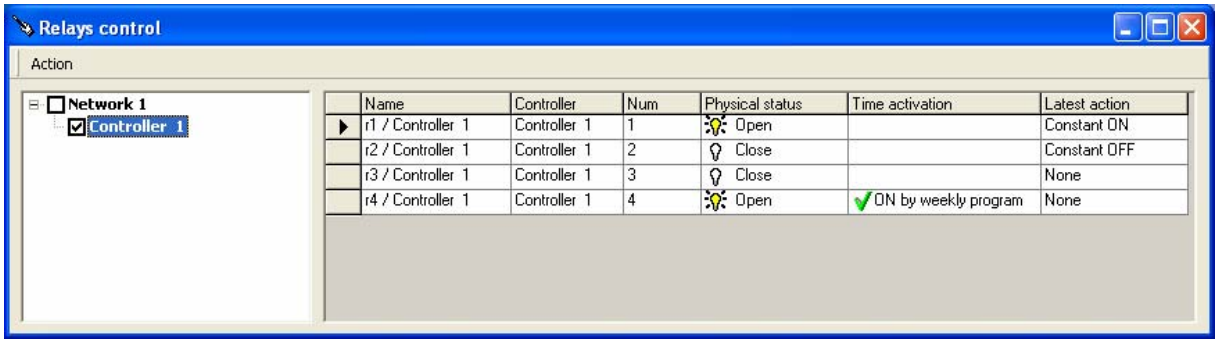
Back to a normal situation

When the crisis is over, allocate a normal value (0 or 1) to the crisis level to regularize the situation.

7.2. Relays Control

This screen displays in real time the dynamic status of relay activation. It is accessible from the "Active Alarms - Output Status" screen too. This screen is made up of two windows:

- **Left window:** System controllers list
- **Right window:** Relays regarding the controllers selected



Menu

Action:

- **Refresh**: Click on this button to update manually the relays information.
- **Return to normal mode**: To cancel all actions described below.
- **Activate relay continuously (Constant ON)**: Constant relay activation, for a permanent door opening for example.
- **Deactivate relay continuously (Constant OFF)**: Constant relay deactivation, for a permanent door closing for example.
- **Activate relay during**: Temporary relay activation, for switching on / off an indication light, during a defined delay for example. Specify the number of seconds (from 1 to 120 sec.).

Table analysis

Left Window: System controllers list sorted by controller network. Select the required controllers. Inactive controllers are represented in grey.

Name: Relay name

Controller: Controller name that the relay belongs to

Num: Output number in the controller.

Physical status: Open or Close. During reading time or communication problems with the controller, a '**?**' mark is displayed to show that the status is unknown.

Time activation: This column shows if a Weekly Program has been attributed to the relay:

- V **ON by weekly program**: The relay is activated because a weekly program has been attributed and the current time falls within the activation boundaries of the weekly program ('green' periods'). The relay is automatically activated according to time zones.
- X **OFF by weekly program**: The relay is deactivated because a weekly program has been attributed and the current time falls outside the activation boundaries of the weekly program ('red periods'). The relay is automatically released according to time zones.
- **No text**: No weekly program has been attributed to the relay.

Note: The "WP Always" weekly program permits to trigger incessantly a relay while the "WP Never" weekly program ensues in a constant deactivation.

Latest action: Shows if the normal situation has not temporarily been affected manually or by the activation of an action, a process or a global reflex.

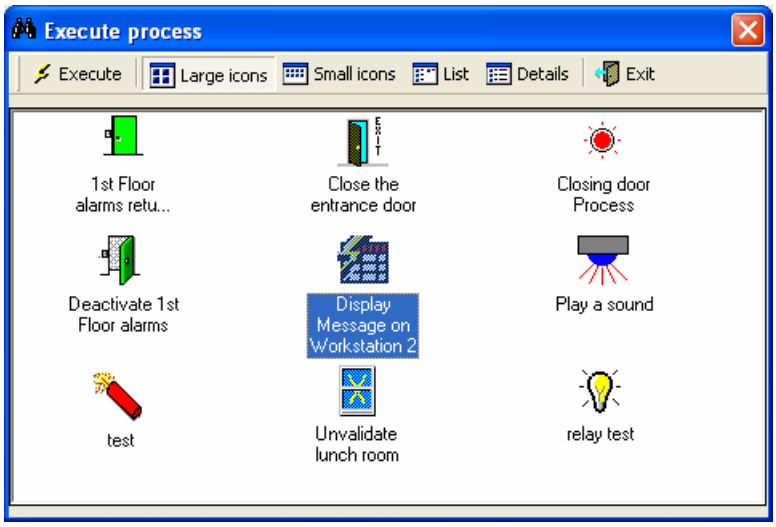
Tips & Notes

Sorting out information

The information in the table can be sorted out. Each column can serve as a sorting criterion. To organize information in an increasing order, click on the column header. To sort the information in a decreasing order, click again on the column header.

7.3. Execute Process

The following screen reassembles all processes of the database with their associated icons.



Command Buttons

Execute: Click for executing the selected process.

Large icons, Small icons, List & Details: Click on these buttons to display the existing processes with large icons, small icons, simple list or detailed list.

Exit: Click to close the “Execute Process” screen and go back to the main screen.

Note: Double-Clicking on one of the icon of the screen launches the associated process automatically.

8. “Tools” MENU

8.1. Report wizard

8.1.1. Report wizard - Basic Concepts

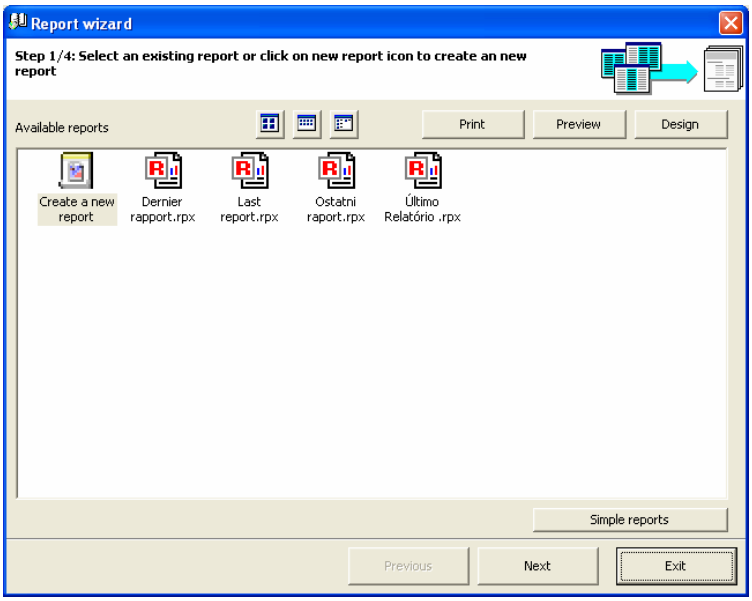
PRONET PLUS system incorporates a powerful report wizard for generation, modification and update of personalized reports. Reports are compiled from the journal or from any other information of the database (parameters, events or modules). They are generated in the language of the application. They can be displayed, printed or exported.

Four user-friendly screens lead, step by step, the user to the widespread functions. They fit the need of the layman as well as those of the confirmed user.

8.1.2. Report wizard - Step 1 / 4: Report Selection

The first screen of the report wizard allows for consultation of existing report and creation of new ones. It is accessible via the icon of the navigation bar or via the ‘’Tools‘’ menu.

Note: The last report is automatically saved.



Command Buttons

Large icons, Small icons & List: The three blue icons allow the organization of the list of the existing reports into the screen.

Print: Click to print the selected report

Preview: Click preview on the screen the selected report, as it will be printed

Design: Click to re-design the report printing (for confirmed users only)

Simple reports: Click to create quickly a standard journal report or to display a journal query

Next: Click to go to the next step of the report wizard

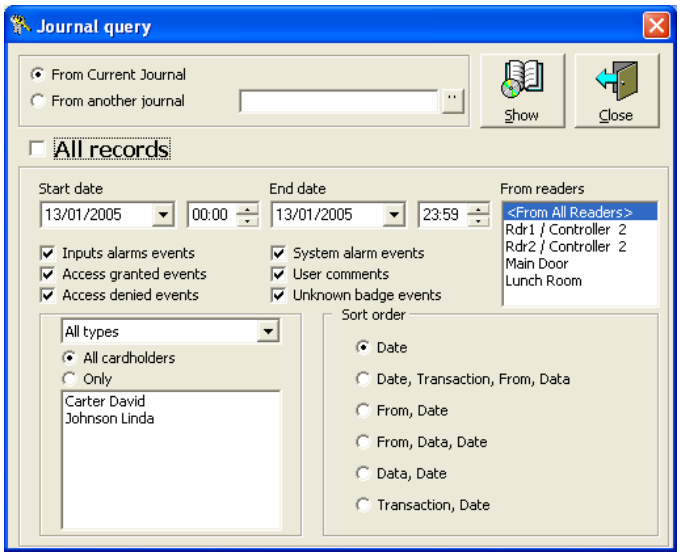
Exit: Click to close the report wizard and go back to the main screen

What to do:

- To create a pre-defined standard journal report: press the “Simple reports” button.
- To create a new report: select the ‘Create a new report’ icon from the list and press the “Next” button.
- To print an existing report: select it from the list and click on “Print” button
- To edit or export an existing report: select it from the list and click on “Preview” button
- To modify an existing report: select it from the list and click on “Next” button

8.1.2.1. Report wizard - Step 1 / 4 - Simple reports

This screen allows the creation of a standard journal report based on customized queries.



Fields

Select the report data to display:

- **From Current Journal** (by default)
- **From another journal**: Select the journal by using the **[…] button** (with "Access" database ONLY)

All records: Check this box to display all the information available in the system; the bottom part of the screen is shaded grey. If this option is not checked, the bottom part of the screen is activated to allow the selection of the data filtering criteria.

Filtering and Sorting out data: Select the data filtering criteria from the journal

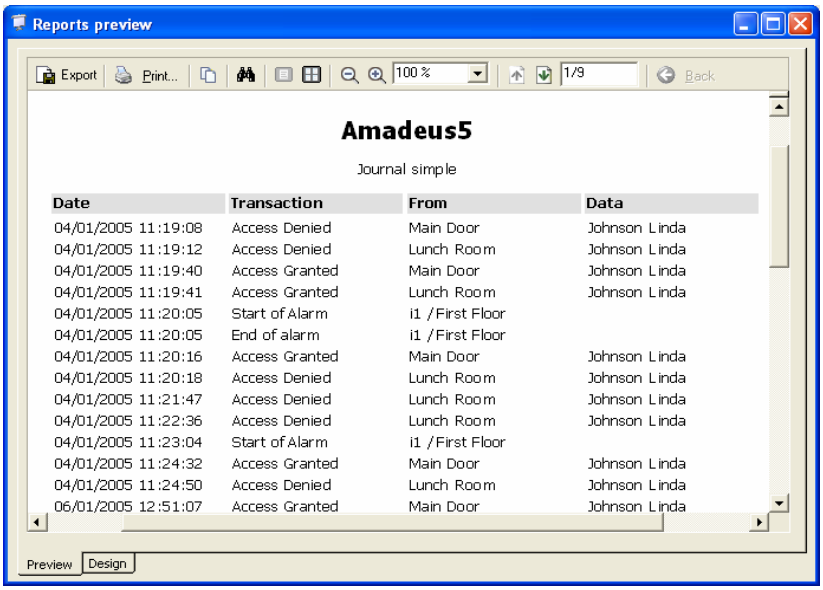
- **According to date**: Select the date and hour of the start and the date and hour of the end.
- **According to reader**: Select the required reader(s).
- **According to events**: Choose the events to keep: Inputs alarms, Access granted, Access denied, System alarm, User comments, Unknown badge.
- **According to cardholders**: Select the required cardholder(s).
- **Sort order**: Select the desired display order of the data.

Show: Click to display the report data.

Close: Click to close the report wizard and go back to the main screen.

8.1.2.2. Report wizard - Step 1 / 4 - Preview

This screen allows the preview of an existing report before printing and/or exporting.


Reports preview
Export
Print...
100 %
1/9
Back
Amadeus5
Journal simple
Date
Transaction
From
Data
04/01/2005 11:19:08 Access Denied Main Door Johnson Linda
04/01/2005 11:19:12 Access Denied Lunch Room Johnson Linda
04/01/2005 11:19:40 Access Granted Main Door Johnson Linda
04/01/2005 11:19:41 Access Granted Lunch Room Johnson Linda
04/01/2005 11:20:05 Start of Alarm i1 /First Floor
04/01/2005 11:20:05 End of alarm i1 /First Floor
04/01/2005 11:20:16 Access Granted Main Door Johnson Linda
04/01/2005 11:20:18 Access Denied Lunch Room Johnson Linda
04/01/2005 11:21:47 Access Denied Lunch Room Johnson Linda
04/01/2005 11:22:36 Access Denied Lunch Room Johnson Linda
04/01/2005 11:23:04 Start of Alarm i1 /First Floor
04/01/2005 11:24:32 Access Granted Main Door Johnson Linda
04/01/2005 11:24:50 Access Denied Lunch Room Johnson Linda
06/01/2005 12:51:07 Access Granted Main Door Johnson Linda
Preview
Design

Toolbar Buttons

Export: Click to export the selected report in the following formats:

- RTF - Rich Text Format
- PDF - Portable Document Format
- HTML - Hyper Text Markup Language
- XLS - Microsoft Excel
- TIF - Tagged Image Format
- TEXT

Print: Click to print after having specified printing parameters.

Copy this page in the clipboard: Click to copy the current page only

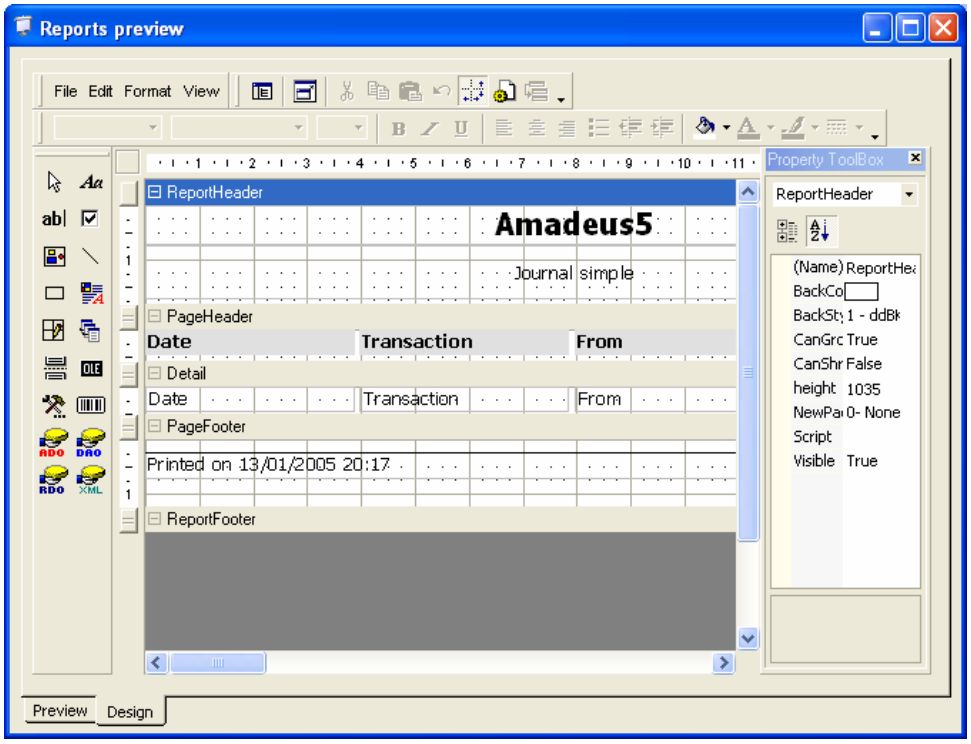
Find: Click to search for a specific word in the selected report.

Single Page, Multiple Page, Zoom Out, Zoom In, Zoom: Click to adjust the report preview.

Previous Page, Next Page, Page: Click to navigate in the report.

8.1.2.3. Report wizard - Step 1 / 4 - Design

This screen is reserved for confirmed users only. It allows the design of an existing report. Clicking on the 'Preview' tab displays the preview of the report; it is useful to check the new modifications in real time.



Operating Mode

The Design tab is based on a professional tool of Active Report ®. In this manual we will not cover the large variety of options but we only give some basic instruction and tips:

- **Moving selected fields**: Select an existing field and drag and drop to the required position in the window.
- **Lengthen or shorten the space allocated to a field**: Select an existing field and drag the blue squares around the field to resize it.
- **Delete a field**: Select an existing field and delete it.
- **Change the text in a label/text box:** Select the field and edit the text on the 'Property ToolBox' window, in 'Caption' (for a label) or 'Text' (for a text box). Don't change 'Name'.
- **Change the font**: Select an existing field and change the font on the 'Property ToolBox' window, in the 'Font' field.
- **Add a new field or a picture**: Select the field type from the toolbar on the left and drop it in the layout. If it is a picture field, go to the "Picture" field of the 'Property ToolBox', click on the **[…] button** and browse your PC for any graphic file.
- **Change the Report Header background**: Select the Report Header window and change in the 'Property ToolBox' window, the "BackColor" field and set the "BackStyle" field to **1**.
- **Save all changes**: Select the 'File/Save' menu and save the report on the 'Reports' folder under the application folder with RPX format.

8.1.3. Report wizard - Step 2 / 4: Data Selection

This step of the report wizard and the next steps allow creating a new report or modifying the structure of an existing report. This second step enables the selection of the data source and the choice of the columns that appear in the report. By default, certain columns are automatically selected by the system. This choice and their order are easily modified.

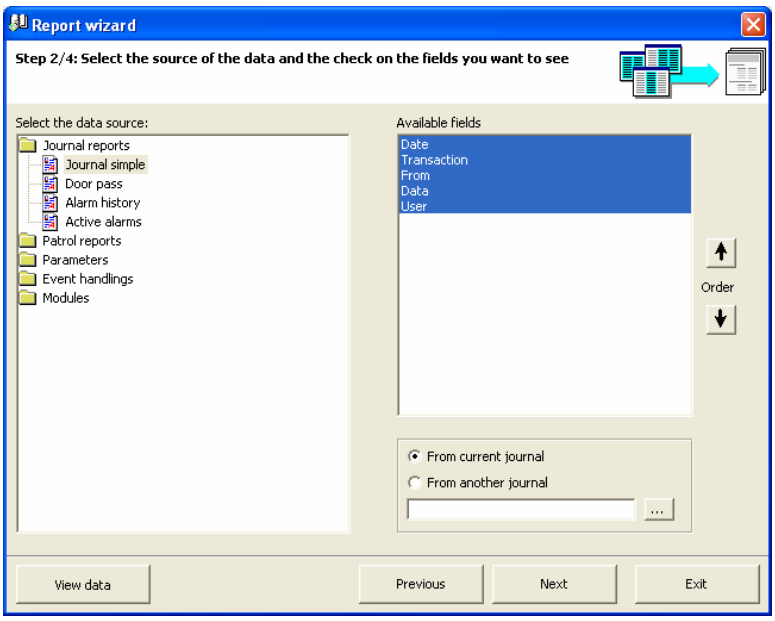
Note: This screen is also displayed at any time from any screen, by clicking on the “Print” button (“F11” function key), to display the report of the corresponding parameters.

Data displayed

Left Window: Data sources list sorted by report type. Select the required data source

Right Window: The list of available fields to display in the report. The wordings on blue background appear by default in the report; the others will not be displayed in further stages. Click on a field to include or exclude it from the selection.

Buttons [🡅] & [🡇]: Click on these buttons to move a selected field in order to re-order the columns in the report as required.



Select the report data to display: PRONET PLUS allow the choice of the journal (period) of the report:

- **From current journal** (by default)
- **From another journal** (with “Access” database ONLY): Select any other journal of the system by using the **[…] button**, and specify its name and its directory.

View data: Click on this button to preview the content of the data; click again on the “View data” button to quit this mode.

Previous: Click on this button to return at the previous step of the report wizard.

Next: Click on this button to go to the next step of the report wizard.

Exit: Click on this button to close the report wizard and go back to the main screen.

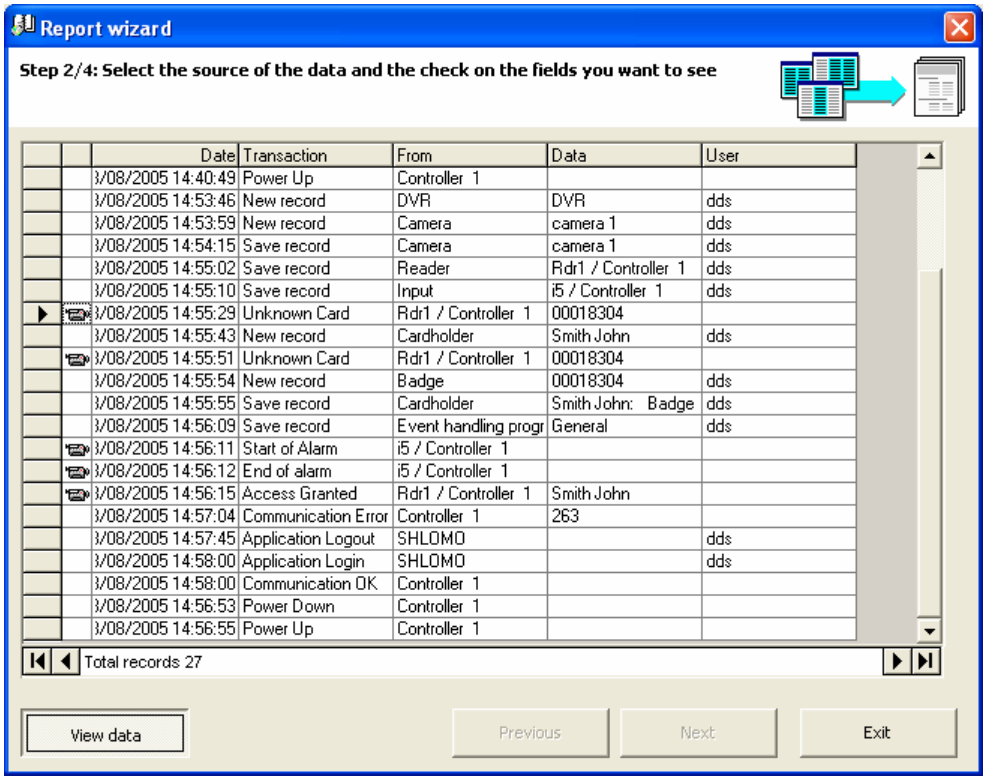
What to do:

- To display the available data sources of a report type: double-click on the required report type from the left window
- To display the available fields of a data source: click on the required data source from the left window; the list of available fields appear in the right window, some of them already selected (in blue).
- To select the required fields: click on the available fields from the right window for changing the default selection according to your requirement
- To re-order the fields as required: use the arrows button to move the fields. The “View data” button may be used to preview the data of the report.
- To continue the creation or the modification of a report: press the “Next” button to go to the next step of the report wizard

8.1.4. Report wizard - Data Viewing

Open the “Report Wizard”, click ‘Next’, select "Journal Simple" from the list of available reports and click on the “View data".

This screen allows previewing the content of the current report data at the different steps of the report wizard. Clicking on the “View data” button opens it.


Report wizard
Step 2/4: Select the source of the data and the check on the fields you want to see
Date
Transaction
From
Data
User
3/08/2005 14:40:49 Power Up Controller 1
3/08/2005 14:53:46 New record DVR DVR dds
3/08/2005 14:53:59 New record Camera camera 1 dds
3/08/2005 14:54:15 Save record Camera camera 1 dds
3/08/2005 14:55:02 Save record Reader Rdr1 / Controller 1 dds
3/08/2005 14:55:10 Save record Input i5 / Controller 1 dds
3/08/2005 14:55:29 Unknown Card Rdr1 / Controller 1 00018304
3/08/2005 14:55:43 New record Cardholder Smith John dds
3/08/2005 14:55:51 Unknown Card Rdr1 / Controller 1 00018304
3/08/2005 14:55:54 New record Badge 00018304 dds
3/08/2005 14:55:55 Save record Cardholder Smith John: Badge dds
3/08/2005 14:56:09 Save record Event handling progr General dds
3/08/2005 14:56:11 Start of Alarm i5 / Controller 1
3/08/2005 14:56:12 End of alarm i5 / Controller 1
3/08/2005 14:56:15 Access Granted Rdr1 / Controller 1 Smith John
3/08/2005 14:57:04 Communication Error Controller 1 263
3/08/2005 14:57:45 Application Logout SHLOMO dds
3/08/2005 14:58:00 Application Login SHLOMO dds
3/08/2005 14:58:00 Communication OK Controller 1
3/08/2005 14:56:53 Power Down Controller 1
3/08/2005 14:56:55 Power Up Controller 1
Total records 27
View data
Previous
Next
Exit

Data displayed

Date, Transaction, etc.: Data fields that will be printed in the final report. The report data are discribed below, row by row.

Icon : A video recording is linked to this event. A context menu is displayed by clicking right on it, proposing to launch the video record linked to the corrsponding event (for use with the Video Module ONLY).

Command Buttons

Buttons [◄] & [►]: Click on these buttons to skip from one record to the next.

Buttons [|◄] & [►|]: Click on these buttons to select the first or the last record.

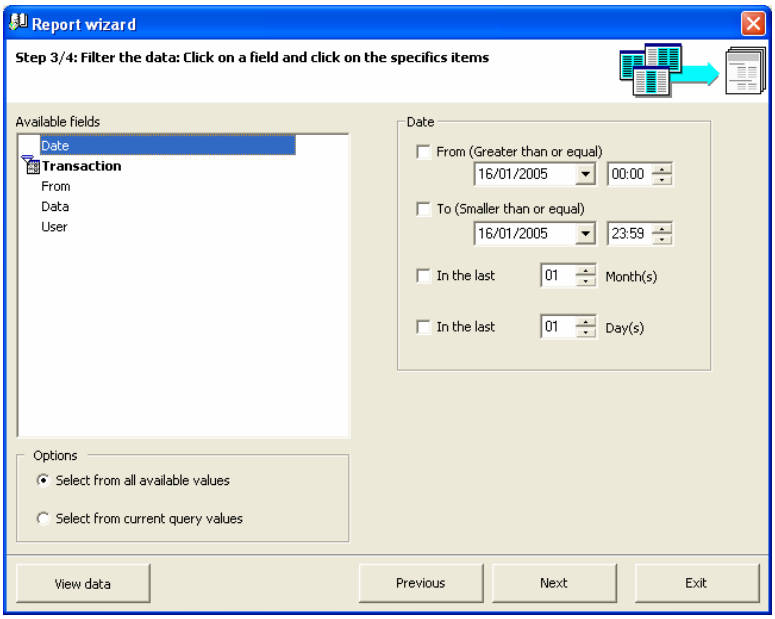
View data: Click on this button to exit the screen and return to the report wizard.

Exit: Click on this button to close the report wizard and go back to the main screen.

8.1.5. Report wizard - Step 3 / 4: Data Filtering

The third screen of the report wizard allows to fine tune the report by filtering the data. The fields selected in the previous screen are displayed at the top of the list. Fields non-withheld appear below the separation lines. When appropriate, fill the filtering criteria in the right window. It is possible to specify filtering criteria for fields not mentioned in the report.

Data displayed



Left Window: The list of the fields. Select the fields to filter

Right Window: The filtering criteria of the selected field. Fill the criteria, if needed

Options:

- **Select from all available values**: All the data of the selected field appear on the right window
- **Select from current query values**: For restricting the criterion choice to current query.

View Data, Previous, Next, Exit: Same functions as described in the previous step.

What to do:

- If filter is not required, press the “Next” button to go to the next step of the report wizard.
- To keep into the report only specific data: select from the left window the fields to which the data belong in order to display in the right window the associated filters:

  If the selected field has a date format, use the filters: ‘From’, ‘To’, ‘In the last X Months’, ‘In the last X Days’ for limiting the report to a specific period.

  If the selected field has a number format (i.e. Personal crisis level), use the filters: ‘Greater than’, ‘Smaller than’, ‘Equal to’ for limiting the report to one or several specific values.

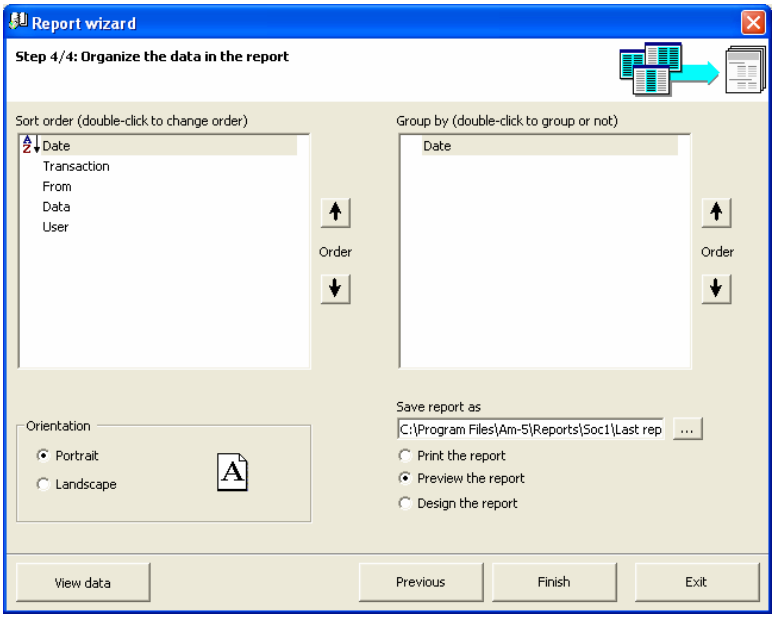
  If the selected field has a Boolean format (i.e. No access during holidays), use the filters: ‘Yes / true’, ‘No / False’ for limiting the report to a specific answer.

  If the selected field has a text format (i.e. Full name), unselect the ’All’ option and then, select the data which must remain in the rapport. The ‘Select all’, ‘Select none’ and ‘Invert’ buttons may help the selection. The ‘<NULL>’ selection of the selected field allows to leave in the report only the records for which this field is empty.
- To preview the data of the report: press the “View data” button (see the “Report wizard - Data Viewing” paragraph).
- When only the data requested are filtered: press the “Next” button to go to the next step of the report wizard.

8.1.6. Report wizard - Step 4 / 4: Data Organization

This last step allows data organization before preview for printing or exporting.

Data displayed



Left Window: Double-click on the fields for sorting it by alphabetical order or by reverse order (Z to A) or for cancelling the sorting; by default, the data are sorted alphabetically on the first field from the list.

Right Window: Double-click on the fields for grouping the sorted data by the selected criterion; by default, no field grouping is selected.

Buttons [↑] & [↓]: Click on these buttons to classify the sorted fields or the grouped fields by importance order.

Orientation: Specify the report orientation (Portrait or Landscape)

Save report as: Specify the name and the saving directory of the file. Accept the system choice or modify it with the **[…] button**.

What to do with the report: Print the report, Preview the report, Design the report

Finish: Click to save the report and to execute the selected option (Print the report, Preview the report or Design the report).

View Data, Previous, Exit: Same functions as described in the previous step.

What to do:

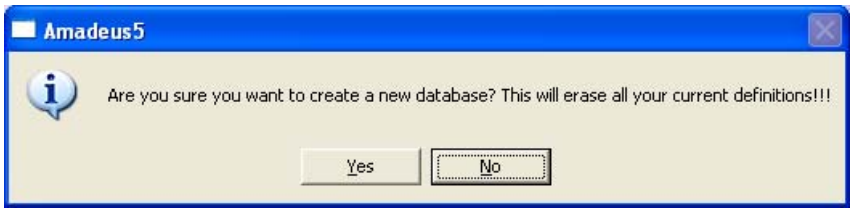
- To name the report: type the name in the “Save report as” field. This name will appear in the available reports list, in the “Report wizard - Step 1 / 4: Report Selection” screen and then, it could be opened easily.
- If sorting the report is not required: press the “Finish” button to save and preview the report, as it will be printed (see the “Report wizard - Step 1 / 4 - Preview” paragraph).
- To sort or group the data into the report: double-click on fields from the left window for data sorting or from the right window for data grouping.
- To preview the data of the report: press the “View data” button (see the “Report wizard - Data Viewing” paragraph).
- When the data are sorted or/and grouped: press the “Finish” button to save and preview the report, as it will be printed (see the “Report wizard - Step 1 / 4 - Preview” paragraph).
- To print directly the report: select the “Print the report” option and press the “Finish” button.
- To modify the structure of the report: select the “Design the report” option and press the “Finish” button (see the “Report wizard - Step 1 / 4 – Design” paragraph).

8.2. Create New Database

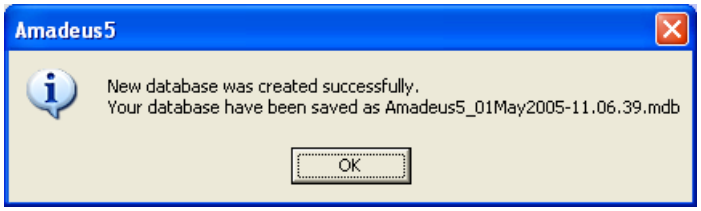
The PRONET PLUS application allows the storage of several databases. The application installer has thus a constant access to all sites databases. This command permits to create a new clean database, which becomes the active database. ***This command is NOT available with SQL database***.

If using the Multi-company Module, this option will be available for super-users only (See the "Multi Company Module" chapter for further reference).

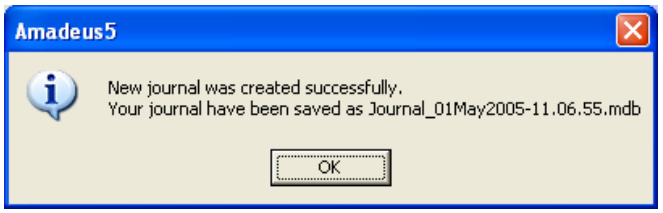
A warning message is displayed before applying the request in case of wrong action.



Information from the current database is saved. The system displays in a message (see opposite) the name of the saved file.



A database creation leads to create a new journal. The system displays in a message (see opposite) the filename, which contains the former journal.



The extension of the file is 'mdb' (Access database only). By default, the files are saved in the directory: "C\ProgramFiles\Amadeus5\Backup".

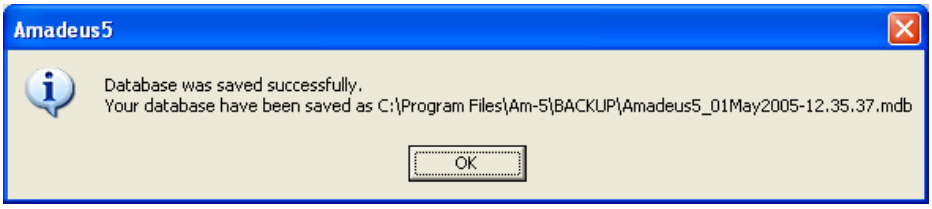
The default destination can be modified in the "Tools - Options - Files Location" screen.

8.3. Save Database

This command permits to save the database. The size of the PRONET PLUS database cannot exceed 70Mb for good operating condition. Once a month, it is therefore advisable to clean the system of unnecessary data.

By selecting this command, the system opens a saving window with the Windows functions. By default, the system names the saving file with the current time and date automatically, but the name can be modified. To overwrite a database, select it from the displayed list and confirm or cancel the operation.

The system displays in a message (see opposite) the name of the saved file.



By default, the files are saved in the directory:

"C:\ProgramFiles\Amadeus5\Backup".

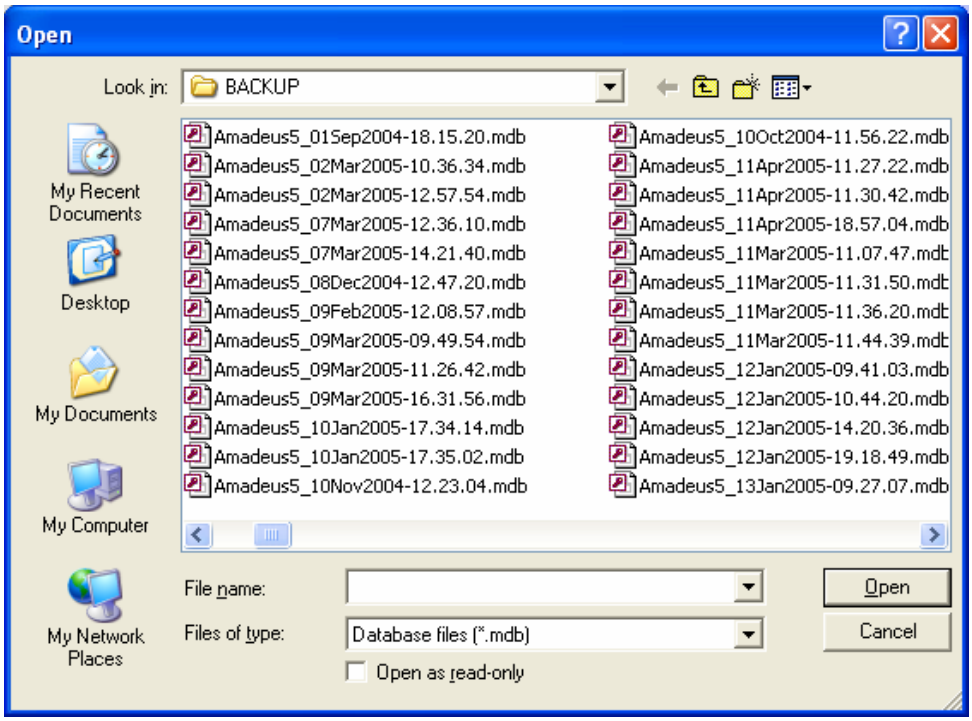
The default destination can be modified in the "Tools - Options - Files Location" screen.

8.4. Restore Database

This command permits to restore a saved database. By selecting this command, the system opens a loading window with the Windows functions.

If using the Multi-company Module, this option will be available for super-users only (See the "Multi Company Module" chapter for further reference).

To restore a database, select it from the list displayed and confirm or cancel the operation. If the operation is confirmed (and if the chosen file contains a valid Amadeus database), then the system saves the current database and replaces it with the new one.



Fields

Look in: Select the folder where is located the required database. By default, the selected folder is: "C:\ProgramFiles\Amadeus5\Backup". This default destination can be changed in the "Tools - Options - Files Location" screen

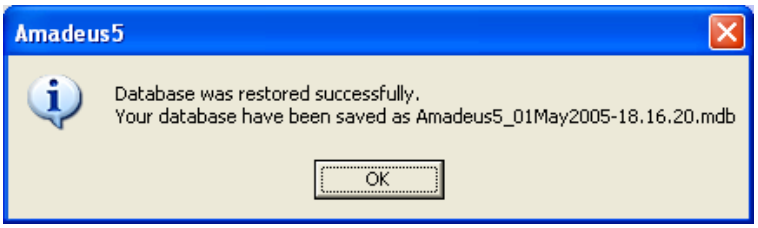
File name: Enter the filename containing the database

Files of type: Select the file type

- Database files (*.mdb): Default extension for Access database
- Database files (*.bak): Default extension for SQL database
- All files (*.*): Ability to open a database created by other applications

Open as read-only: Check this box if the database is loaded for consultation only.

Once the restoring is done, the system displays a message (see opposite), with the filename of the former database.



8.5. Switch Database

This menu is automatically displayed when a secondary database (redundant connection string) is indicated in the "Tools - Options - SQL Server" screen. ***This menu is ONLY available with SQL database***. It allows switching from a database to another one (from the main database to the secondary database, and vice versa).

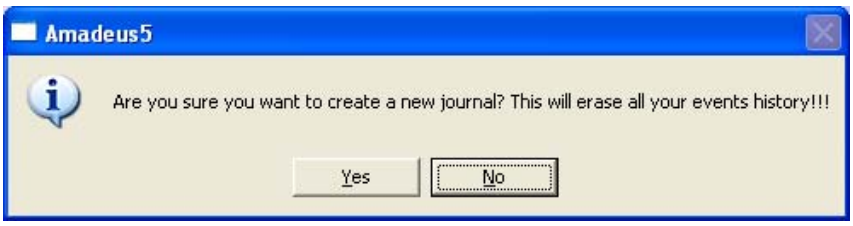
8.6. Create New Journal

A journal is a database of all the events that have occurred in the system. The PRONET PLUS application allows the storage of several event journals and permits to consult them easily.

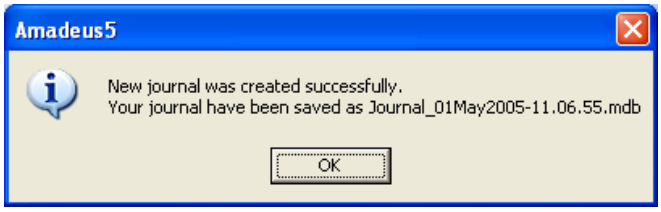
For good operating condition, it is recommended not to let the journal grow more than 150Mb. When the journal reaches this size, it is time to use this command for creating a new journal. This command automatically saves the current journal in a back-up file and creates a new clean one. Then, this clean journal becomes the current journal. ***This command is NOT available with SQL database***.

If using the Multi-company Module, this option will be available for super-users only (See the "Multi Company Module" chapter for further reference).

A warning message is displayed before applying the request in case of wrong action.



The system displays in a message (see below) the filename, which contains the former journal. The system automatically names the saving files with the current time and date.



The extension of the file is 'mdb' (Access database only). By default, the files are saved in the directory: "C\ProgramFiles\Amadeus5\Backup".

The default destination can be modified in the "Tools - Options - Files Location" screen.

Tips & Notes

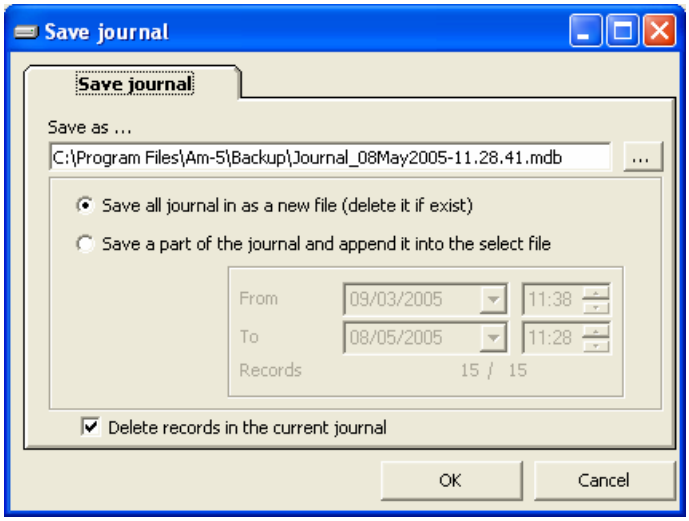
Automatic Journal creation

It can be useful to create a global reflex that will renew the journal on an automatic and a regular basis, each 2 months for example (For more details, see the "Event handling - Action" and "Event handling - Global Reflex" screens).

8.7. Save Journal

This command permits to save regularly the entire or a part of the journal. For good operating condition, it is recommended not to let the journal grow more than 150Mb.

By selecting this command, the system opens the following screen. By default, the system names the saving file with the current time and date automatically, but the name can be modified.



Fields

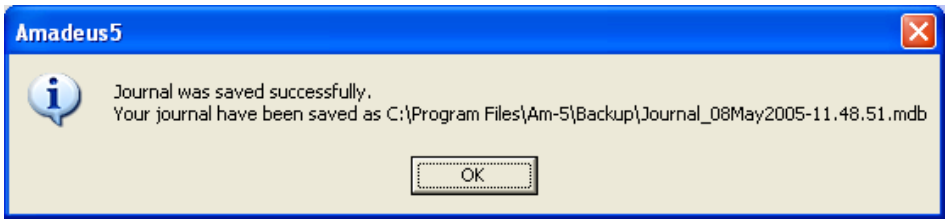
Save as: Accept or modify the name suggested or select an existing filename using the **[...] button**.

Choose one of the following options:

- **Save all journal in as a new file (delete if exists)** (default option)
- **Save a part of the journal and append it into the selected file**
  - **From**: Specify start date and hour of journal
  - **To**: Specify end date and hour of journal
  - **Records**: Number of selected records and total records number

Delete records in the current journal: Default option

Once the saving is done, the system displays in a message (see below) the name of the saved file.



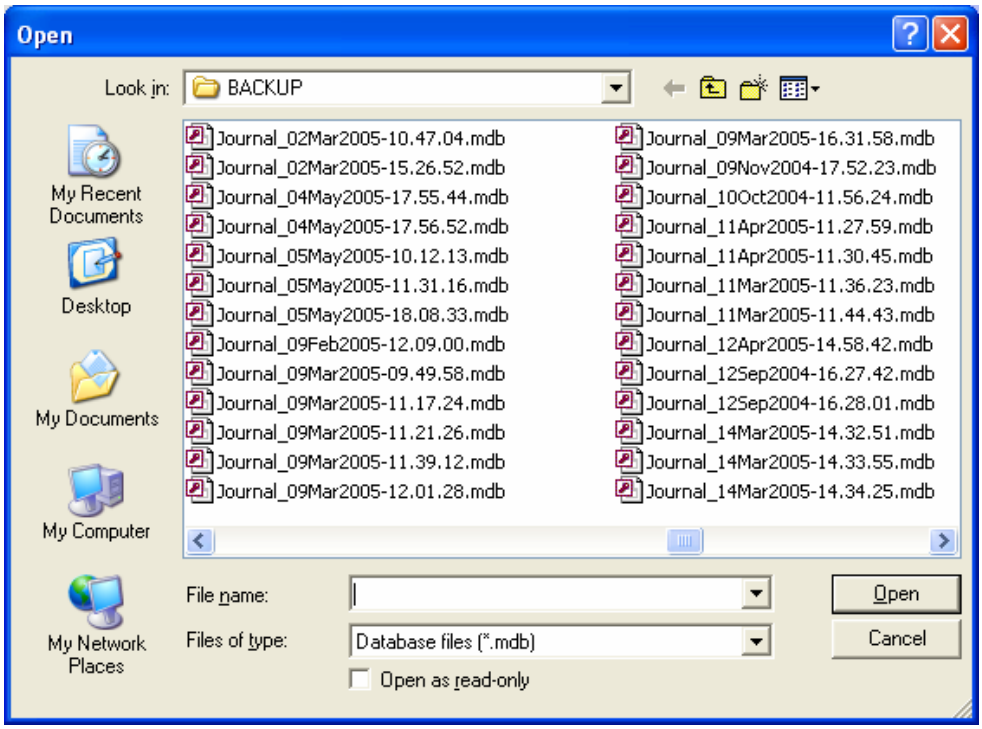
By default, the files are saved in the following directory: "C:\ProgramFiles\Amadeus5\Backup". The default destination can be modified in the "Tools - Options - Files Location" screen.

8.8. Restore Journal

This command permits to restore the data of a saved journal. By selecting this command, the system opens a loading window with the Windows functions.

If using the Multi-company Module, this option will be available for super-users only (See the "Multi Company Module" chapter for further reference).

To restore a journal, select it from the list displayed and confirm or cancel the operation. If the operation is confirmed (and if the chosen file contains a valid Amadeus journal), then the system saves the current journal and replaces it with the new one.



Fields

Look in: Select the folder where is located the required journal. By default, the selected folder is: "C:\ProgramFiles\Amadeus5\Backup". This default destination can be changed in the "Tools - Options - Files Location" screen

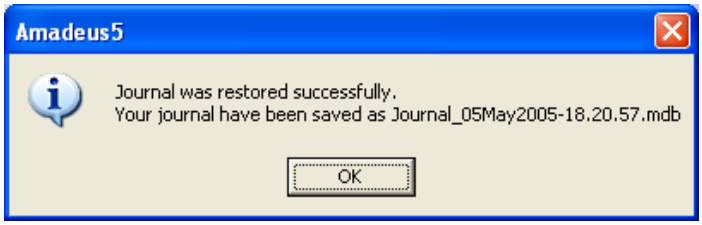
File name: Enter the filename of the journal

Files of type: Select the file type

- Database files (*.mdb): Default extension for Access database
- Database files (*.jrn): Default extension for SQL database
- All files (*.*): Ability to open a journal created by other applications

Open as read-only: Check this box if the journal is loaded for consultation only.

Once the restoring is done, the system displays a message (see below), with the filename of the former journal.



8.9. Cardholders Import Profile

Usually the employees' database is created and kept up-to-date in the human resource department. All databases compatible with ODBC (Open DataBase Connectivity like SQL server, Oracle, MS Access, etc.) can easily be transferred to the PRONET PLUS application. The cardholder database information can include cardholder, badge, access group and department records.

By default the system provides two Data Sources (DSN): Microsoft Access and Microsoft Excel.

Operating mode

- Create a DSN from the ODBC DS Wizard (consult ODBC help for further information) or used one of the DSN created by default (HRAccess and HRExcel).
- Check that the table format is compatible with PRONET PLUS or write a request to modify it.
- Define an import database profile, as described hereafter, and import the table.
- In the "Event Handling – Action" screen, create and execute the action "Import Cardholders" with the selected profile.

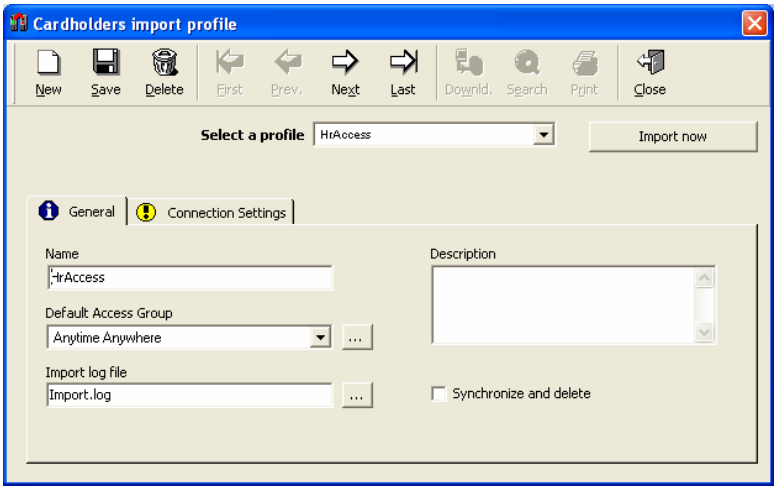
Tips & Notes

Export the employees' database

To export an employees' database, create an action with the "Export Existing Report" type, in the "Event Handling - Action" screen.

8.9.1. Cardholders Import Profile - General

This screen allows the import profiles creation.



Fields

Select a profile: Choose a profile; two profiles have been provided by default (HrAccess and HrExcel).

Import now: Press on this button to launch the import operation.

Name: Name the new import profile.

Default Access Group: Specify the default access group defining the profile or create a new one with the **[…] button**.

Import log file: Specify the filename of the import log file that records information about the import process. The beginning and end of import messages will be displayed in the log screen. By default the name of this log file is "Import.log" and is located in the Amadeus5 running directory. To modify this location, click on the **[…] button**. See also the "Import Database Log only errors" option in the "Tools - Options - Server" screen.

Description: Describe the new import profile

Synchronize and delete: Check this box for deleting existing cardholders if they do not appear in the employees' database.

Note: It is not recommended to use this function when the database is a combination of different databases from different sources. Cardholders that do not belong to the remote database will be removed from the Amadeus5 database.

8.9.2. Cardholders Import Profile - Connection Settings

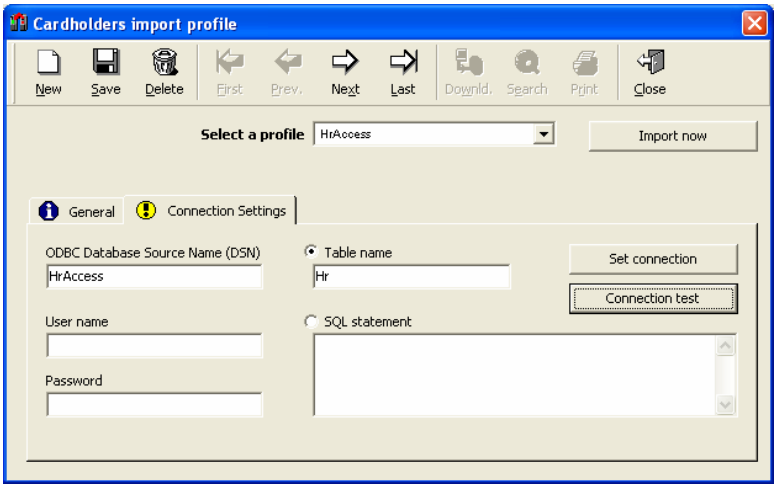
ODBC (Open DataBase Connectivity) is a standard database access method for accessing any data from any application, regardless of which DBMS (DataBase Management System) is handling the data. DBMS is a collection of programs that enables you to store, modify, and extract information from a database.

ODBC manages this by inserting a middle layer, called a database driver, between an application and the DBMS. The purpose of this layer is to translate the application's data queries into commands that the DBMS understands. For this to work, both the application and the DBMS must be ODBC 'compliant', that is, the application must be capable of issuing ODBC commands and the DBMS must be capable of responding to them.

ODBC used SQL as a data access standard. SQL (Structured Query Language) is a standardized query language for requesting information from a database. SQL is being supported by PC database systems because it supports distributed databases (databases that are spread out over several computer systems). This enables several users on a local-area network to access the same database simultaneously.

The ODBC standard allows a link between PRONET PLUS and the client database.

The following screen allows the import profiles definition. It is possible to import a table or to execute an SQL query.



Fields

Select a profile: Choose a profile.

Import now: Press on this button to launch the import operation.

ODBC Database Source Name (DSN): Name the database connection.

User name: Enter a user name.

Password: Enter a password.

Choose one of the following options:

- **Table name**: Enter the name of the table containing the data information.
- **SQL statement**: Type in the request that selects the records to import and defines a new table format compatible with PRONET PLUS.

Set connection: This button is a shortcut to ODBC user data source, which stores information about how to connect the indicated data provider (refer to ODBC help for further information).

Connection test: Select to check that the database has been successfully opened.

8.9.3. Default profiles

By default, two profiles with identical fields are supplied: HrAccess and HrExcel. These profiles use respectively the 'Hr.mdb' and 'Hr.xls' files located in the PRONET PLUS folder. The user may fill the first or the former file uncaringly by using Microsoft Access or Microsoft Excel, with the cardholders' details to import. Once the file filled, the file can be imported by launching the import operation under PRONET PLUS.

Example

The fields of the 'Hr.xls' file are built as follows :

Number	Last Name	First Name	Type	Badge	Technology	Company
201	Smith	John	1	12345678	1	
202	Johnson	Linda	0	22334455	1	

Etc…

Note: In these two files, the name of the fields cannot be modified. The two first fields are MANDATORY.

Fields

Number: Mandatory field. Use unique values (no duplications). Modifying this number after the first import will create a new cardholder in the access control database.

Last Name: Mandatory field.

First Name: Optional field. First or last name may be recurring, but not both jointly. For example, two John Smith cannot be created.

Type: Optional numerical field (0-Visitor, 1-Employee, 2-Guard, 3-Deleted).

Badge: Optional alphanumerical field. Up to 8-digit code, authorized digits: 0 to 9 and A to F.

Technology: Optional numerical field (1-Magnetic, 2-Bar code, 3-Wiegand, 4-Smart card 1, 5-Smart card 2, 6-Smart card 3, 7-Touch, 8-Radio).

Company: Optional free text.

Department: Optional free text.

Office Phone: Optional free text.

Access Group: Optional free text. Use the same name as in the access control application; if not a new access group will be created.

PIN code: Optional numerical field. Up to 4-digit number, authorized digits are 0 to 9.

To Date: Optional date field; set the same format as your Windows regional settings.

Validated: Optional numerical field (0-Not validated, 1-Validated)

Street: Optional free text.

City: Optional free text.

ZIP: Optional free text.

Personal Phone: Optional free text.

Description: Optional free text.

Car Number: Optional free text.

ID: Optional free text.

Supervisor: Optional numerical field (0-Supervisor, 1-Not supervisor).

Label 1 to 4: Optional free text.

Tips & Notes

Existing Cardholders Database Update

The cardholders import procedure allows updating existing cardholders by using source databases (HR.xls, HR.mdb, etc.), even when this database does not contain a 'Last Name' column.

However, the following cases are considered errors:

- A new cardholder without a Last Name.
- An existing cardholder without last name, i.e., when the 'Last Name' column is present at the source database but the field has been deleted.

Importing of 'Lift program' and 'Parking Users Group'

Importing cardholders with their Lift program name or their Parking Users Group name is possible by adding two columns in the source database file (HR.xls, HR.mdb, etc.). The column headers in the source HR file must bear exactly the following names:

- **Lift program**
- **Parking Users Group**

When using a Microsoft Excel file, make sure that the two columns are included in the "HR" range.

Note: The range of the included cells can be edited with Excel through 'Insert - Name - Define'. In that screen, select the HR and edit the range details at the bottom field of that window.

Updating the deleted employees

PRONET PLUS supports the import of type 'Deleted'. The value 3 in the column "Type" means cardholder deleted. This way cardholders can be deleted even when the 'Synchronize and Delete' option is not checked.

8.9.4. More on SQL statement

The SQL statement is a request that selects the records to import and defines a new table format compatible with PRONET PLUS.

The field "Number" is a primary key field which corresponds to the "Number" field of the "Cardholder" screen in PRONET PLUS. The "Last Name" field is also mandatory.

The following rules needs to be respected:

- Each cardholder receives a unique cardholder number.
- Names are case sensitive.
- The first and last names combination has to be different for each cardholder; first or last name may be repeat, but not both.
- Cardholders that do not belong to the remote database are removed from the PRONET PLUS database, when the option "Synchronize and delete" is selected.
- New access group names are automatically created in the Amadeus5 database
- If an imported badge number is already allocated to an existing cardholder in the Amadeus5 database, the old badge is removed from the existing cardholder and the ID number is associated to the imported cardholder.
- If an imported cardholder has already a badge in the Amadeus5 database, the system is deleting the other badge.

Example

This example explains how to import cardholders from a database that has a different structure (different fields name, etc.):

1. Create a simple database:
   - Create an empty database under MS Access and save it under “db1.mdb”
   - Create a table with 4 columns and name each column (ex. Index, First, Last, Badge)
   - Save the table with a significant name as “users”
   - Enter at least 2 data lines for 2 cardholders (for card codes keep 8 digits)
   - Save and close this database

2. Create the import profile:
   - Start PRONET PLUS and create a new cardholders import profile
   - Name this profile and select the second tab “Connection Settings” and click the “Set connection” button
   - On the “User DSN” tab, click the “Add” button and select “Microsoft Access” from the displayed list
   - In the “Data Source Name” field type a logical name (ex. MyHRimport) and click on the “Select” button for selecting the previous Access database (db1.mdb)
   - Click twice on the “OK” button to go back to the import profile screen.
   - In the “ODBC” field, type the name that corresponds to the data source (MyHRimport)
   - Select the “SQL Statement” option for entering the following SQL query:

     SELECT [Index] AS [Number], [Last] AS [Last Name], [First] AS [First Name], Badge FROM users

   - Save and click on the “Connection test” button; the “Database connection successful” message must be displayed. By doing this the application confirms both the connection to the external DB and also the query syntax.

3. Automatic import:

Now, the external database is connected. It just needs to create an “Import Cardholders” action with the selected profile and create the associated process and global reflex and then the import can be done automatically, triggered either by an event (input alarm, card pass, etc.) or at a predefined schedule.

8.10. Create a group of badges

This menu allows creating or removing a group of badges in a single command.

It is accessible via the “Parameter - Badge” or “Tools - Create a group of badges” menu.

Refer to the “Group of Badges” paragraph for further information.

8.11. Options

This screen defines the different using parameters of PRONET PLUS. It is divided into eight tabs:

- Files location
- Language
- Communication
- Journal / log screen
- Messages
- General
- Server
- SQL Server

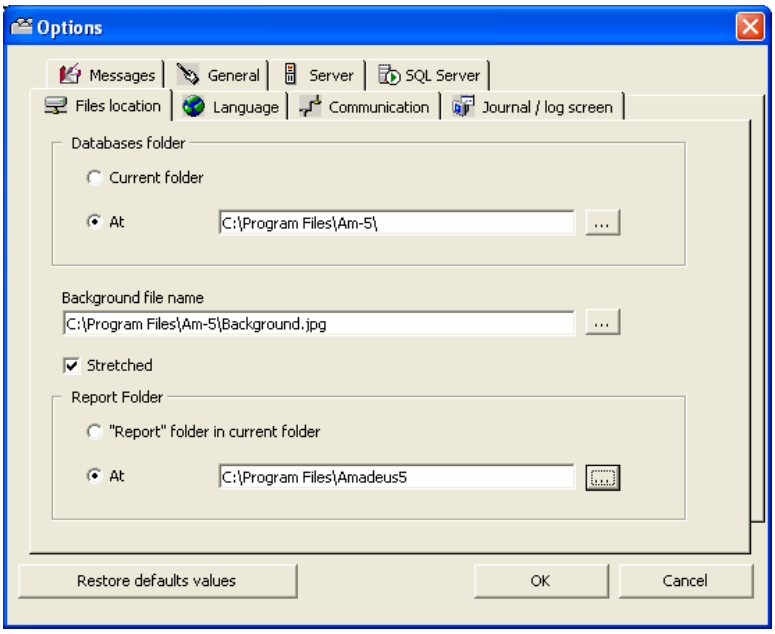
At the botton of each tab, three buttons are always displayed:

- **Restore default values**: Click for recovering the original configuration.
- **OK**: Click for saving the new changes and back to the main screen.
- **Cancel**: Click for cancelling the new changes and back to the main screen.

8.11.1. Files Location

This tab defines the folder location of the database files and the background picture of the main screen.

Fields



Databases folder: Choose the database files location:

Current folder: The software folder, by default.

At: Indicate the desired databases directory by using the **[…] button**.

Background filename: Select the desired file by using the **[…] button**.

Stretched: Check this box to stretch the selected background picture on the entire screen.

Report folder: Choose the reports files location:

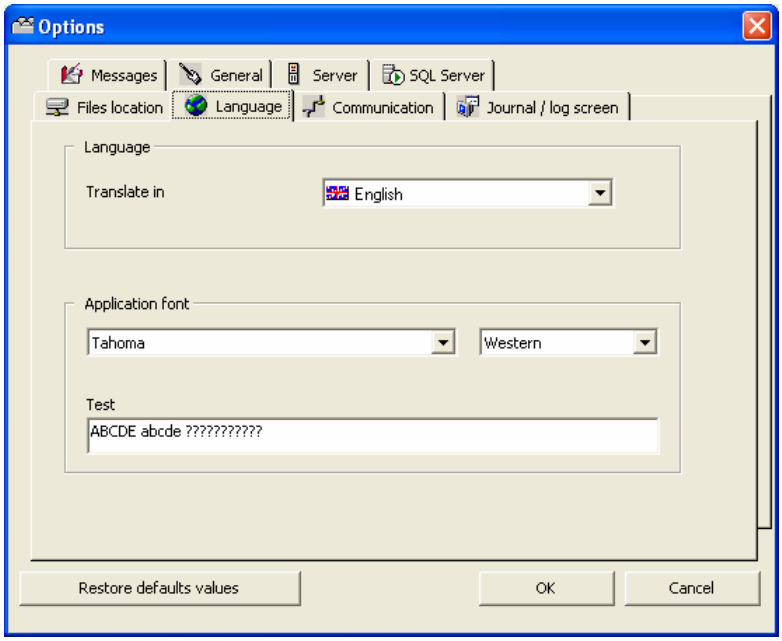
"Report" folder in current folder: The software folder, by default.

At: Indicate the desired directory by using the **[…] button**.

8.11.2. Language

PRONET PLUS supports many languages. Specify the requested language and confirm your choice. Screens and functions are translated instantaneously, with no need to reboot the application.

Fields



Translate in: Select from the list the required language. All screens and menus will be translated.

Application font: Select the desired font. It concerns all menus and screens.

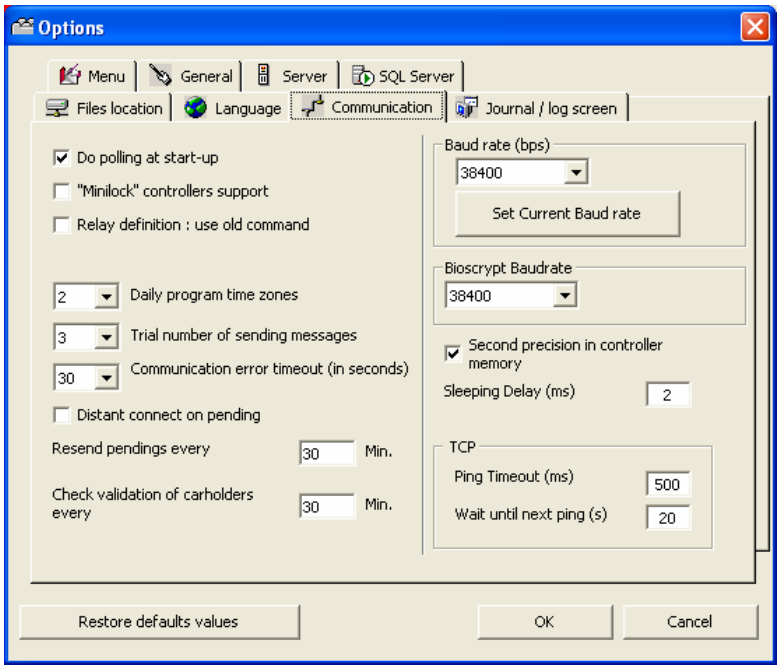
Font according to the language: Select the font type according to the alphabet used (Chinese, Western, etc.)

Test: Example that serves for checking how the selected font is displayed.

8.11.3. Communication

Default communication parameters are defined in this tab. ***This tab will NOT be displayed if the application runs as a Workstation***.

Fields



Do polling at start-up: Check this box to execute polling when loading the application. By default, this option is selected. The polling can be manually stopped by choosing the "Communication - Stop Polling" menu or by pressing on "SHIFT" and "F8" keys simultaneously.

"Minilock" controllers support: Check if this specific controller is used.

Relay definition: use old command: Check if TPL revision B controller is used.

Daily program time zones: Choose among 2 (by default) or 4 for modifying the number of daily programs (consult also the "Daily Program" chapter).

Trial number of sending messages: Choose between 1 to 10 (3 by default) for modifying the number of times a command will be sent to the controller in case of absence of communication between PC and controller (see the "Time out delay" paragraph in the "Controller Network" chapter). If the command is still not received, this command joins the "Pending" commands and the PC will try to send it with the other pending commands once the communication established (see the "Resend pending" option below).

Communication error time out (in seconds): Choose between 1 to 300 (30 by default) for modifying the delay beyond which the computer will signal a communication problem, in case of absence of communication between PC and controller (see the "Time out polling" paragraph in the "Controller Network" chapter).

Distant connect on pending: Check this box for performing modem dial-up when pending commands are sent (see the 'Updating dial up controllers' section).

Resend pending every X Min.: Enter a value (30 by default). Pending commands are commands that a controller has not received (usually in case of a communication problem) and will be sent again, by default, every 30 minutes (default value) till the communication recovering.

Check validation of cardholders every X Min.: Enter a value (30 by default). Every 30 minutes (default value), the program checks if new cardholders need validating or invalidating, in which case the corresponding cardholders definitions are sent to the controllers. The default frequency of this checking (30 minutes) may be modified here.

Baud rate (bps): Select from the list the controller baud rate. This rate is the same for all the controllers.

> **Set current Baud rate**: Click on this button for sending immediately the selected baud rate to all the controllers.

Bioscrypt Baud rate: Select from the list the biometric reader baud rate. This rate is the same for all the biometric readers.

Second precision in controller memory: Check this box for setting the controllers to send the exact seconds value of an event. A one-time init of all controllers is required after this setting is being changed.

Sleeping Delay (ms): Waiting delay between two consecutive commands that PC sends to the controllers.

TCP:

> **Ping Timeout (ms)**: Maximum delay that PC gives to the TCP/RS485 converter to answer after a Ping (question from the PC to the converter).
>
> **Wait until next ping (s)**: When the TCP/RS485 converter does not answer after the first ping, the PC awaits this delay before pinging it again.

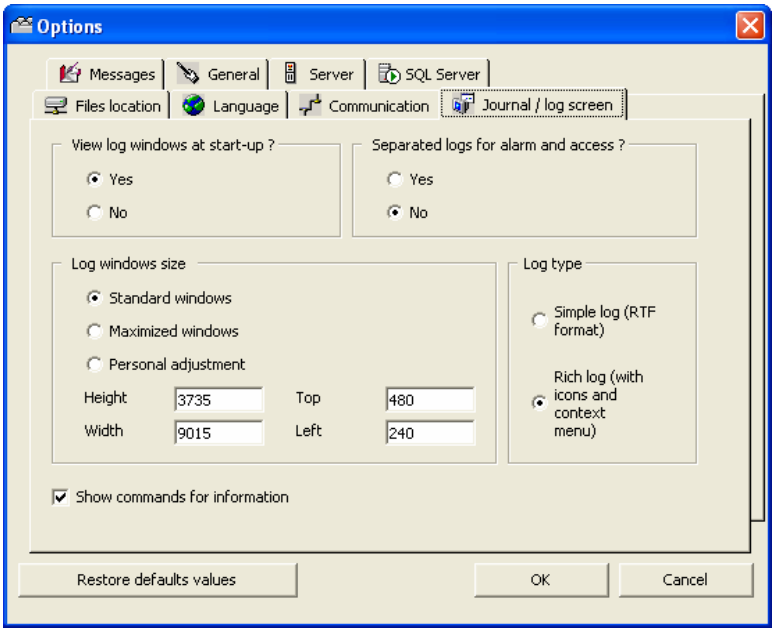
8.11.4. Journal / Log Screen

This tab allows the log window customizing.

The log display is a temporary linear colour display that indicates events as they occur in the system. The events are displayed as they take place (consult also the "View / Clear Log" chapter).

Changes take effect instantaneously, no need to reboot the application.

Fields



View log window at start-up: Select 'Yes' or 'No' as required.

Separated logs for alarm and access: Select 'Yes' in order to divide the log window in two parts: one with the access and system messages, and the other with the alarm messages. By default, a single log shows access, alarms and system messages.

Log window size: To modify the size of the log window, choose among the following options:

Standard window: By default (Height: 3735, Width: 9015, Top: 480, Left: 240).

Maximized window: Depends on the screen definition.

Personal adjustment: Specify the required values for height, width and the window positioning at the top and at the left.

Log type:

Simple log: By default

Rich log (with icons and context menu): Enables using a right-click menu with some shortcut option at the main log. Such as getting historical video records from the events rows of the log (see details at the "Rich Log" paragraph).

Show commands for information: Check this box for showing the system commands in the log display. This option is purposed for application developers mostly; this is the reason why it is not selected by default.

8.11.5. Messages

This tab gives the possibility to choose which are event types to save in the journal and which are event types to display on the log. In this last case, it is possible to modify the messages colour of the log (see also the "View / Clear Log" chapter).

Changes take effect instantaneously, no need to reboot the application.

By default, all event types are saved in the journal and most of them are viewable on the log window.

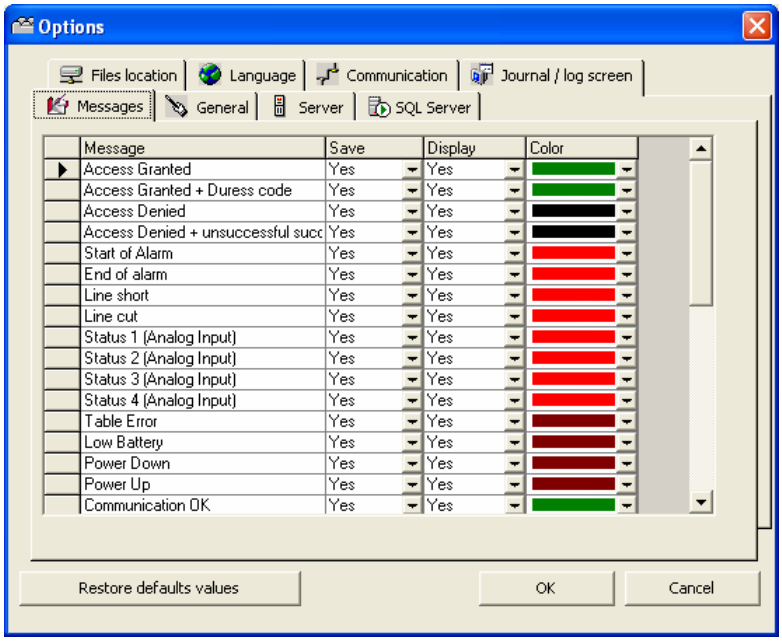
Fields

Message: Name of the event type.

Save: Select 'Yes' for saving this event type in the journal.

Display: Select 'Yes' for displaying this event type on the log.

Colour: Select the message colour for log display; consult the "View / Clear Log" chapter for the default colours of the messages.



Tips & Notes

Audit of the Database changes

To perform an audit of the database modifications entered by different users, save (and eventually display) the following event types:

- New Record,
- Save Record,
- Delete Record.

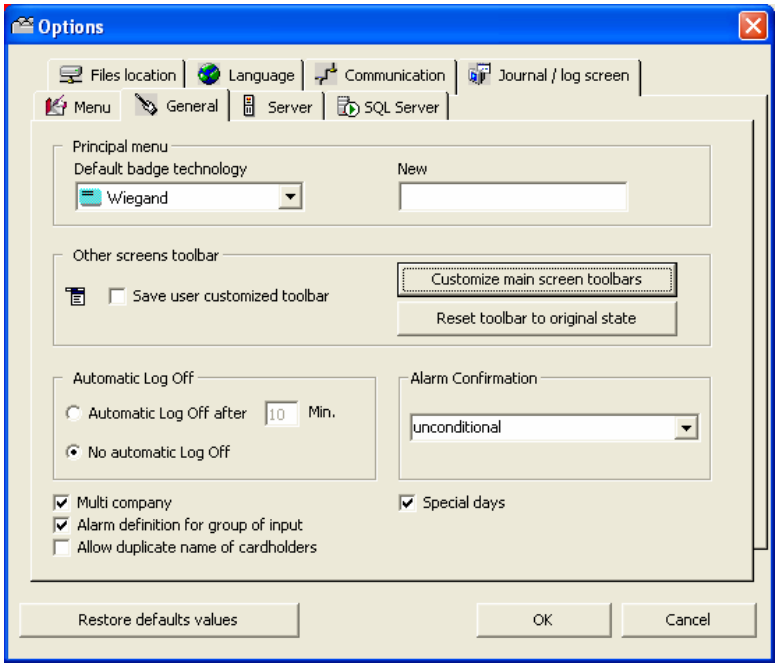
Then, for each record modification, the following information is accessible:

- What: Record creating, changing or deleting
- Which Screen: Name of the screen in which the database modification has been done
- Which Record: Name of the record on which the modification has been done
- Details of the modification (for badges and cardholders): Old value => New value
- Who: Name of the user which has modified the record

8.11.6. General

This screen defines default values for some parameters like badge technology, badge code, main screen toolbar and automatic log off.

Fields

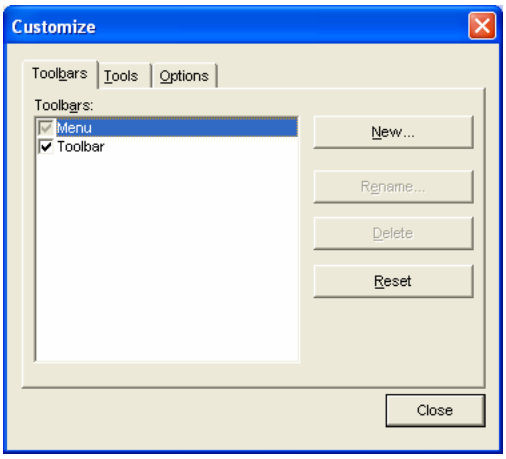


Badge:

Default badge technology: Each site works generally with a main badge technology; the system creates new badges using the technology, which is selected here, without having to specify the technology used at each badge creating.

Default Badge Code: Type a beginning card code common to all badges, if needed; this is useful when the site code is not written on the badges.

Main screen toolbar: A customized toolbar gives added flexibility to the system:



Save user customized toolbar: Check this box for keeping the customized toolbars after restarting the application; if this box is unchecked, all customized toolbars will be lost after closing the application.

Customize main screen toolbars: Click on this button to display the customize screen here opposite in order to create or modify toolbars. For more details, see the "Personalized Navigation Bar" paragraph.

Reset toolbar to original state: Click on this button to recover the toolbars at their original state. This leads to delete all customized toolbars.

Automatic Log Off:

Automatic Log Off after X Min: Check this box for locking automatically the session after X minutes of inactivity. The login will be performed after typing the username and its password.

No automatic Log Off: Option (by default) for cancelling the Automatic Log Off of the session.

Alarm Confirmation: Select the active alarm confirmation mode for the "Active Alarms" screen:

Unconditional: At any moment the user can confirm the acknowledge of an alarm, no matter if this alarm is currently active or not. This action allows the alarm to disappear from the active alarm list.

While input is ON: do not enable: The user is not allowed to confirm the acknowledge of an alarm, if this alarm is currently active or if there is a communication failure with the relevant controller.

While input is ON: warn user: At any moment the user can confirm the acknowledge of an alarm, but when this alarm is active a warning message appears before confirming with the alternative to confirm this alarm or not.

Multi company: Check this box to display the multi-company fields where appropriate (see "Multi Company Module" section). This option requires that the plug has the Multi Company Module (the letter "M" is included in the plug definition).

Alarm definition for group of input: Check this box for displaying the fields related to input groups in the "Input - Alarm status" screen and defining an input group weekly program in the "Event-Handling Program – Alarms" screen.

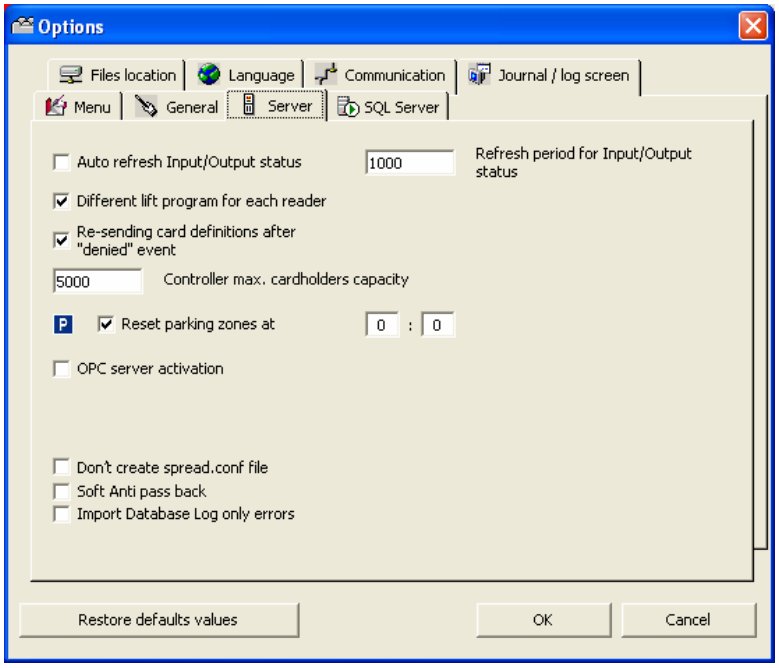
Allow duplicate name of cardholders: Check this box for creating cardholders with the same last and first name. In this case, it is necessary to enter a unique number per person in the "Number" field of the "All cardholders" screen.

Special days: Check this box for adding two supplementary daily programs (S1-S2). See more details at the "Weekly Program" chapter.
Note: This feature requires a supporting firmware, please check with your vendor.

8.11.7. Server

This tab customizes options, which are only available from the PC server. ***This tab will NOT be displayed if the application runs as a Workstation***.

Fields



Auto refresh input/Output status: Check this box for the automatic refresh of the I/O physical status in the "Active Alarms" screen.

Refresh period for Input/Output status: Type the refresh delay in milliseconds (1000 by default).

Different lift program for each reader: Check the box for using a different lift program per reader (see "Lift Module" section). *This feature is required the use of EPROM TPL from 01/03/2003 or later.*

Re-sending card definitions after "Denied" event: Check this box for downloading instantaneously card information in case of access denial; when the cardholder will instinctively present his badge for a second reading, access authorization will be based on up-to-date card information.

Controller max. cardholders capacity: When creating a new badge, a unique identification number is associated to the badge, filling an allocation table in the controller. Generally, the systems can create badges till the maximum capacity limit (defined by the plug). But deleting badges causes in the badge allocation table suspends, which can slow down the allocation process if the table has an important size. Type here the cardholders maximum capacity limit (5000 by default) in order to reduce this risk of slowing down. The limit must be lower than the plug and controller (RAM and ROM) capacities.

Reset parking zones at X:X: Check this box for daily resetting all parking zone counters; each day at the fixed time specified in the 2 boxes (hh:mm), all parking spaces will be free (see "Parking Module" section).

OPC server activation: Check this box to enable the integration of PRONET PLUS with build-in OPC client applications, in order to control and execute PRONET PLUS commands from a SCADA application. This option requires that the plug has the OPC Module (the letter "O" is included in the plug definition). Consult the Appendix A about OPC server for further explanations.

Don't create spread.conf file: Check this box in order to set the application not to create automatically the file spread.conf each start-up. This feature is only needed in the rare cases when it is needed to create the Spread configuration file manually. (Advanced users only).

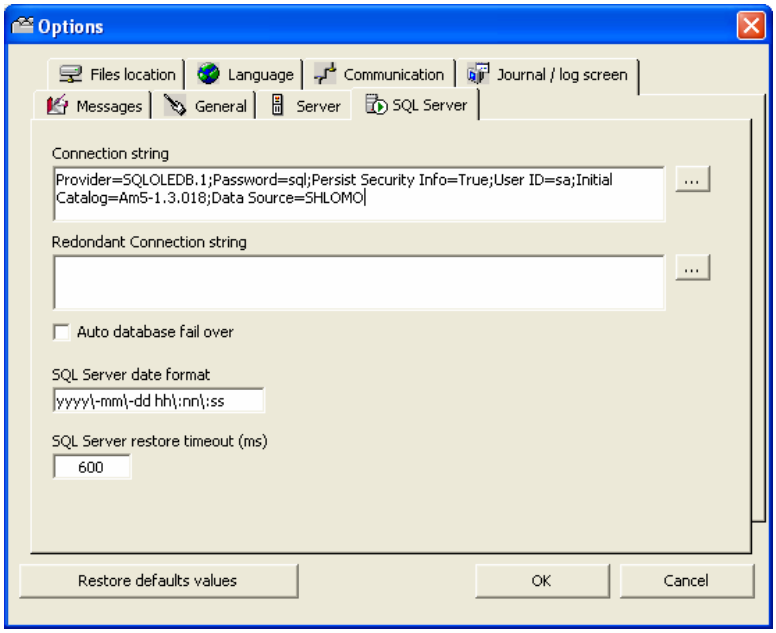
Soft Anti-Pass back: Check this box to activate this function (see 'Soft Anti-Passback').

Import Database Log only errors: Check this box to not fill the 'Import.log' file with the detailed information during import process and then conserve space on hard disk. Import errors, if there are some, will be saved on this file (see also the "Cardholders Import Profile - General" paragraph).

8.11.8. SQL Server

This tab defines the SQL database parameters. It is only usable with a MS-SQL format type database. It requires the SQL module in the plug (dongle) license.

Fields



Connection string: Connection parameters related to the main database. Clicking the **[…] button** allows modifying these parameters.

Redundant Connection string: Enter the connection parameters related to a secondary database, if needed. Clicking the **[…] button** allows accessing these parameters directly.

Auto database fail over: Select this box when it is needed to automatically switch to the backup database in case of main database failure and vice versa.

SQL Server date format: Modify the date format as defined in MS-SQL Server application, if needed.

SQL Server restore timeout (s): Indicate the maximum required time of a database restoration, if needed. After the end of this time, if the restoration is not done the application will stop the restore operation.

Tips & Notes

Switching from a database to another one

A secondary database can be added here. This database can be identical to the main database (but located on another PC) to allow the data source redundancy and guarantee the stability of the system in case the main SQL database, or the connection to it, fails. In this case, the server, as well as the workstations, may be preset to automatically switch to a backup SQL database, by checking the ‘Auto database fail over’ box.

But this database can be different from the main database too, and then, it is possible to switch from a database to another one using the « Tools - Switch Database » menu.

9. “Help” MENU

9.1. Amadeus help content

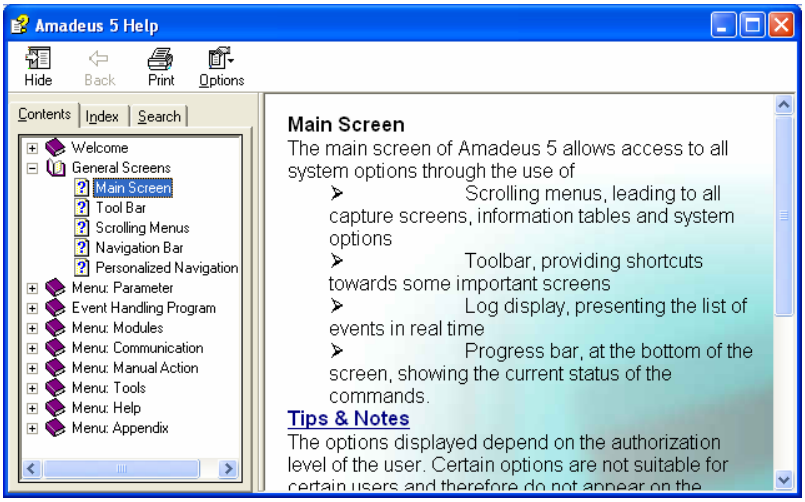
The explanation of the current screen can be obtained by pressing on “F1” function key at any time or via the “Help - Amadeus help content”.

Data displayed

Left Window: The list of the available topics. Click on a book or on any topic.

Right Window: The help content about the selected topic is automatically displayed.

Note: The help content can be displayed on the screen or printed.


Amadeus 5 Help
Hide
Back
Print
Options
Contents
Index
Search
Welcome
General Screens
Main Screen
Tool Bar
Scrolling Menus
Navigation Bar
Personalized Navigation
Menu: Parameter
Event Handling Program
Menu: Modules
Menu: Communication
Menu: Manual Action
Menu: Tools
Menu: Help
Menu: Appendix
Main Screen
The main screen of Amadeus 5 allows access to all system options through the use of
Scrolling menus, leading to all capture screens, information tables and system options
Toolbar, providing shortcuts towards some important screens
Log display, presenting the list of events in real time
Progress bar, at the bottom of the screen, showing the current status of the commands.
Tips & Notes
The options displayed depend on the authorization level of the user. Certain options are not suitable for

9.2. Amadeus help index

The “Index” tab of the previous screen contains all help topics sorted by alphabetical order.

- To display quickly all available topics: enter the first letters of the requested topic in the text box from the left window
- To display the requested topic: click on the requested topic from the list of the left window and then on the “Display” button

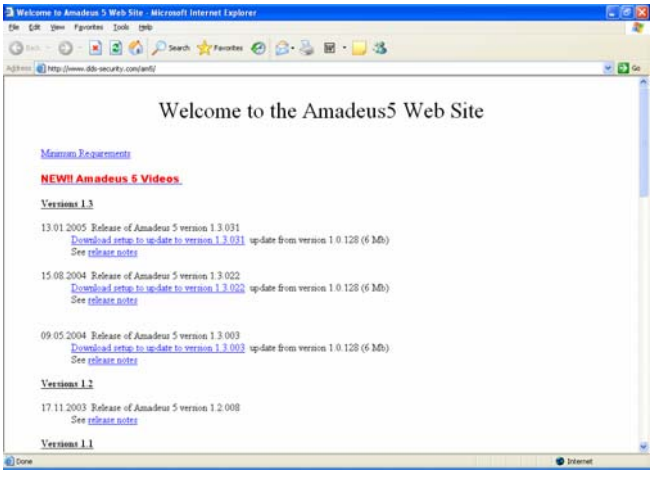
9.3. Amadeus help search

The “Search” tab of the previous screen enables the search of words or specific expressions in the help of the software instead of looking for information by category.

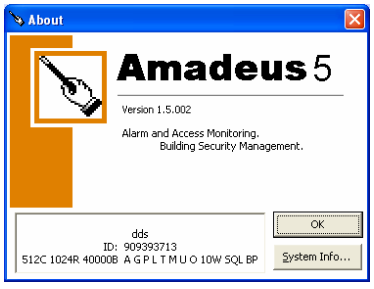
- To display all available topics which contain the request: enter the requested words in the text box from the left window and confirm with the “List Topics” button
- To display the requested topic: click on the requested topic from the list of the left window and then on the “Display” button

9.4. Amadeus on the web

Update from latest version is available through our Web site:



9.5. About PRONET PLUS

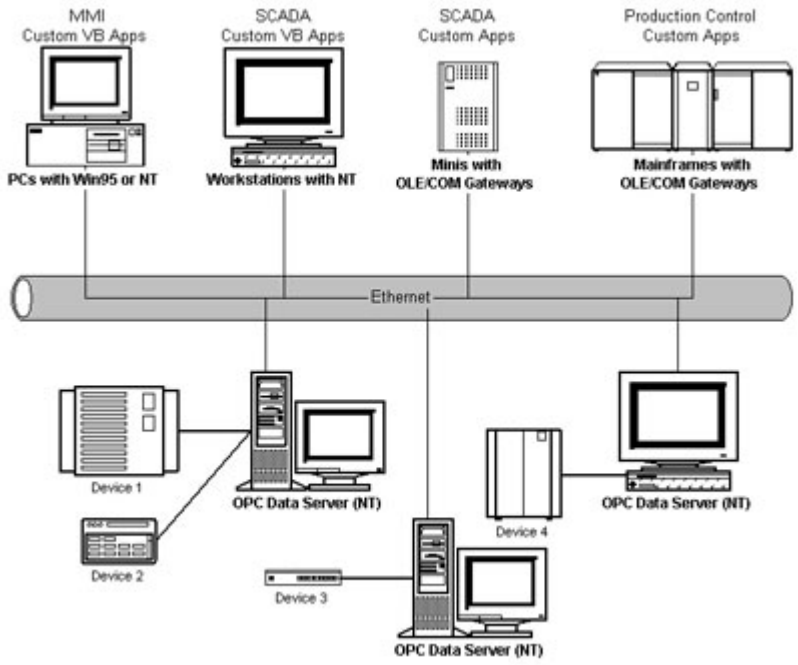


This screen provides the software version, the plug definition and system information.

Appendix A: PRONET PLUS and OPC server

Our access control solution based on PRONET PLUS can be integrated into any SCADA supervision application through software module, via proprietary or OPC protocol. Tags allow on-line bi-directional communication between the installation inputs, relays, doors, all communication transactions, on one hand, and the SCADA relays, processes activation and screens opening, on the other hand.

OPC defines an open industry-standard interface for the data exchange between devices, PLC's and Windows applications. It is based on OLE and ActiveX technology that provides interoperability between different field devices, automation/control and business systems.



The “PRONET PLUS: an OPC Server” document is at your disposal on the PRONET PLUS Installation CD.

Consult your reseller to integrate access control into your SCADA application.

PRONET PLUS provides the following information to OPC Client:

- **Communication status of controller**: Com OK or Com Error
- **Logical status of all inputs**: Open/Close depending on NO/NC, manually deactivated or normal status, etc.
- **Physical status of all relays**: Open/Close, open by global reflex, etc.
- **All PRONET PLUS events**, such as:
  - Access: granted, denied, granted with duress code, denied too much trials
  - Alarm: start of immediate alarm or delayed alarm, end of alarm
  - Technical alarms, such as: power off, table error, etc.
  - Unknown badge

An OPC Client can perform the following operations in PRONET PLUS:

- **Relay control**:
  - Activate continuously - Constant ON
  - Deactivate continuously - Constant OFF
  - Activate during x sec
  - Return to normal mode
- **Inputs**:
  - Input deactivation
  - Return to normal mode
- **Execute PRONET PLUS actions**
- **Execute PRONET PLUS processes**
- **Open PRONET PLUS screens**

Operating mode

- Check that the OPC module has been purchased; the letter “O” should appear in the plug definition.
- Select “OPC Server Activation” in the "Tools - Options - Server” screen.
- Restart the application.
- Read the “PRONET PLUS: an OPC Server” document available on the PRONET PLUS Installation CD.